

JVC

SERVICE MANUAL

MICRO COMPONENT SYSTEM

UX-A4 B/E/G/GI/EN



COMPACT
disc
DIGITAL AUDIO

Area suffix

B	U.K.
E	Continental Europe
G	Germany
GI	Italy
EN	Northern Europe

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1. Safety Precautions

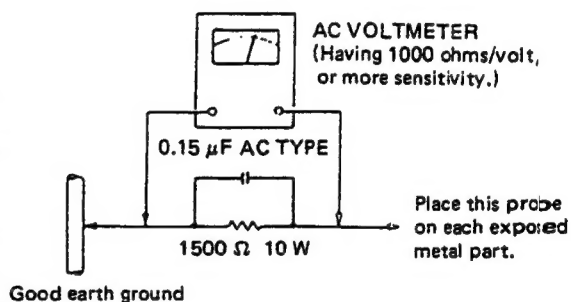
1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacture's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety — related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of service manual. Electrical components having such features are identified by (Δ) on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

After re — assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. using a "Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC(r.m.s.)

• Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a 0.15 μ F AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the



chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC(r.m.s.). This corresponds to 0.5mA AC(r.m.s.).

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

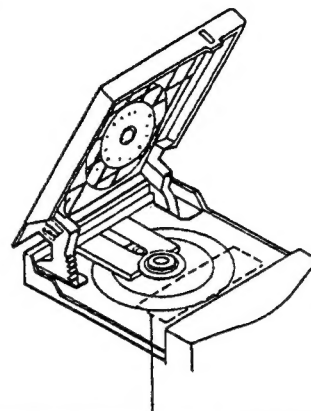
2. Safety Precaution about UX – A4

IMPORTANT FOR LASER PRODUCTS

REPRODUCTION OF LABELS AND THEIR LOCATION

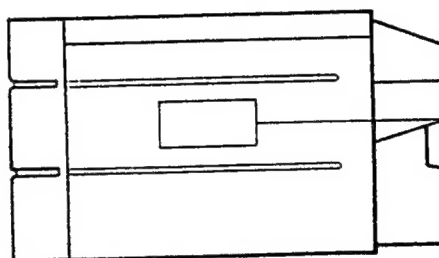
PRECAUTIONS

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD door is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.
6. **CAUTION:** The laser is able to function, if safety switches are out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.



ADVARSEL-Der vil udstråles osynlig laserbestråling når apparatet åbnes og aflåsningsmekanismen frigøres. UNDGÅ AT BLIVE UDSET FOR LASERBESTRÅLING.

DANGER-Invisible laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM.



CD player/tuner section

**CLASS 1
LASER PRODUCT**

Obs:
Apparaten innehåller laserkomponent av högre laserklass än klass 1.

IMPORTANT (in the United Kingdom) Mains Supply (AC 240 V~, 50 Hz only)

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

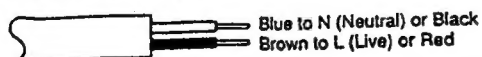
BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:



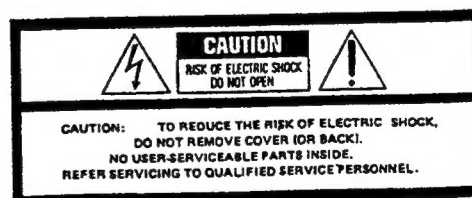
As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT – CONSULT A COMPETENT ELECTRICIAN.

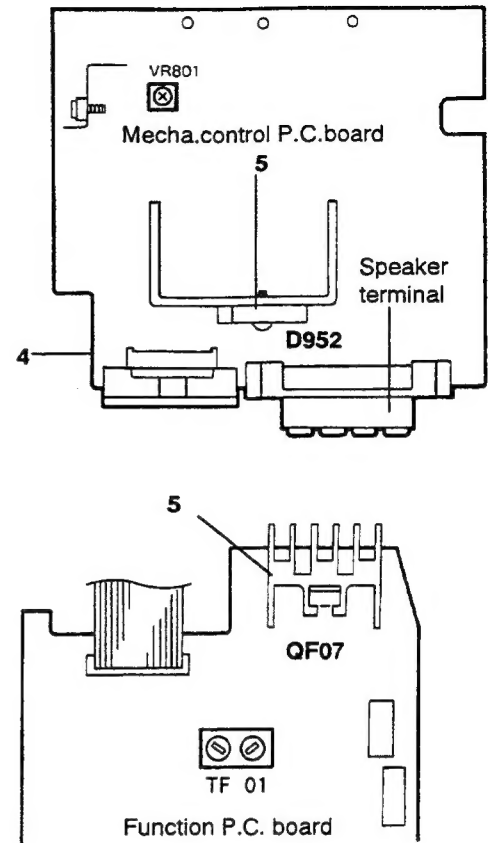
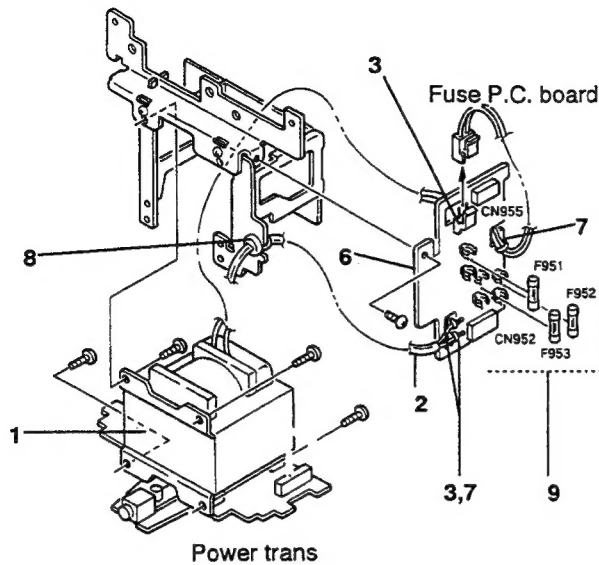
WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR
MOISTURE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.




■ Important points for safety management

1. Check "VTP66J2 - 24D (UX - A4 E/G/GI/EN)", "VTP66T2 - 12D (UX - A4 B)" of power transformer and make sure that any bolt is not loosened.
2. Check the power source cord indication "◁ VDE ▷ (UX - A4E/G/GI/EN)", "SASEC: BS6500 (UX - A4B)" of attachment plug "KP - 419C or SE - 1 (UX - A4 E/G/GI/EN)", "KP - 610, 3A or SE - 5, 3A (UX - A4B)" and make sure that the cord is free from any defect (Damage).
3. ① Concerning the primary terminal and the adjacent secondary terminal on the print circuit board to provide proper creeping and spatial distance, solder must not protrude from soldering round.
 ② The tab for winding the power cord must be twisted and soldered to prevent disconnection.
 ③ The lead of the power cord must be wound around the tab and soldered the spatial distance must be 3.2mm or more.

5. Since the following parts are exothermic, make sure that such parts will not come into contact with any electrolytic capacitor, wire and other parts.
 ICA05, ICA06, IC502, IC701, D952, Q808, QF02, R867, R857, RF38 and heat sink are exothermic parts.
6. Any wire, etc. should be clamped or bonded as indicated in the above diagram so that such wire will not be positioned close to any exothermic parts.
7. Wires must be clamped or secured at the locations shown in the figure so that the wire do not touch to live parts moving part, hot part, or sharp edges.
8. By using the special tool, attach the power cord bushing to the position where "4N - 4" is marked.
9. Set and firmly fix the fuses F951, F952 and F953 respectively to T400mA, T6.3A and T6.3mA after confirming the respective positions.

3. Features

1. Disc-size micro component system consisting of 4 units
2. Active Hyper-Bass circuit for low-frequency sound reproduction
3. Sound mode control (Beat, Vocal, Instrument)
4. One touch operation (COMPU PLAY)
 - When a source button (CD, tape, or tuner) is pressed, the unit's power is turned on and initiates the playback even when the power is set to STANDBY.
5. 35-key remote control unit opens and closes the motor-driven CD door, and operates the usual CD, cassette deck and tuner functions
 - The remote control operates the power ON/OFF switching, volume control, bass/treble control, sound mode control, Active Hyper-Bass ON/OFF switching, and a variety of editing functions.
6. Multi-function CD player
 - Capable of auto-edit recording and programmed play.
7. U-Turn auto-reverse full-logic mechanism with Dolby[®] B NR
 - Auto tape select mechanism.
 - Metal (type IV) and CrO₂ (type II) tape can be played back for superior tone quality.
 - CrO₂ (type II) tape recording capability
 - Music scan^{**} in forward or reverse direction
8. 2-Band digital synthesizer tuner with 30-station (15 FM and 15 AM (MW/LW)) preset capability
 - Seek/manual tuning.
 - Auto preset tuning
9. Timer/Clock function
 - Timer on/off with preset volume function.
 - Wake-up volume setting with 50 different levels.
 - Sleep timer can be set for up to 120 minutes.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol  are trade-marks of Dolby Laboratories Licensing Corporation.

** Under license of Staar S.A. Brussels, Belgium.

4. Specifications

Compact disc player section

Type	: Compact disc player
Signal detection	: Non-contact optical pickup
Number of channels	: 2 channels
Frequency range	: 20 Hz – 20,000 Hz
Dynamic range	: 86 dB
Signal-to-noise ratio	: 86 dB
Total harmonic distortion	: 0.03 %
Wow & flutter	: Less than measurable limit

Radio section

Frequency ranges	: FM 87.5 – 108 MHz AM: (MW) 522 – 1,629 kHz (LW) 144 – 288 kHz
Antennas	: Loop antenna for AM (MW/LW) External antenna terminal for FM (75 ohms)

Tape deck section

Track system	: 4-track 2-channel stereo
Motor	: Electronic governor DC motor (capstan x 1, reel x 1)
Heads	: Hard permalloy head for recording/playback, 2 gap ferrite head for erasure (Combination head)
Frequency response	: 50 – 15,000 Hz (with metal tape)
Wow and flutter	: 0.09 % (WRMS)
Fast wind time	: Approx. 120 sec (C-60 cassette)

Speaker section (each unit)

Speaker	: 12 cm x 1 (Woofer) 5 cm x 1 (Tweeter)
Dimensions	: 160(W) x 251(H) x 203(D) mm
Weight	: Approx. 2.2 kg
General	
Power output	: Max. 40 W (20 W + 20 W) at 4 Ω 28 W (14 W + 14 W) at 4 Ω (10 % THD)
Output jacks	: Speaker x 2 (matching impedance 4 Ω – 16 Ω) Headphones (0 – 30 mW/32 Ω) (matching impedance 16 Ω – 1 k Ω)

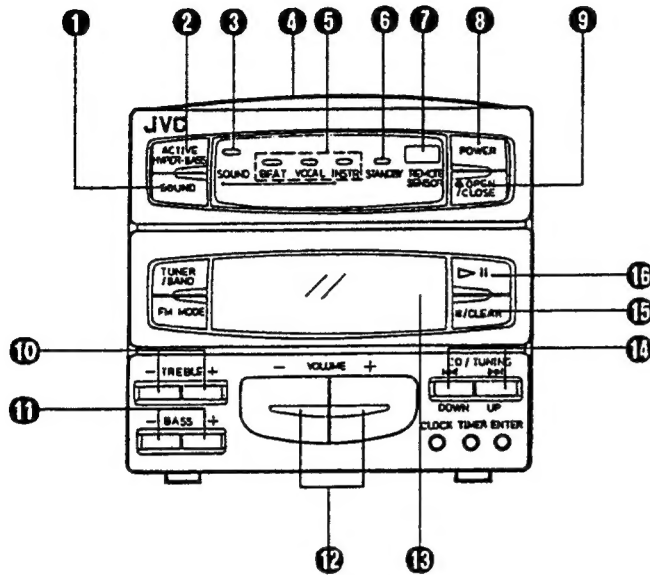
Power supply	: AC 240 V, 50/60 Hz, (UX-A4B) AC 230 V, 50/60 Hz, (UX-A4E/G/GI/EN) Ext. DC 12 V (car battery via optional CA-R120E car adapter)
Power consumption	: 66 W (with POWER SW ON) 4 W (with POWER SW STANDBY)
Dimensions	: 458.5(W) x 255(H) x 208(D) mm including knobs
Weight	: Approx. 8.9 kg
Accessories provided	: Remote control unit (RM-RXUA4) x 1 Battery "R6" x 2 (for the remote control) FM feeder antenna x 1 Loop antenna stand x 1 Speaker cord x 2 Antenna adapter x 1

Design and specifications are subject to change without notice.

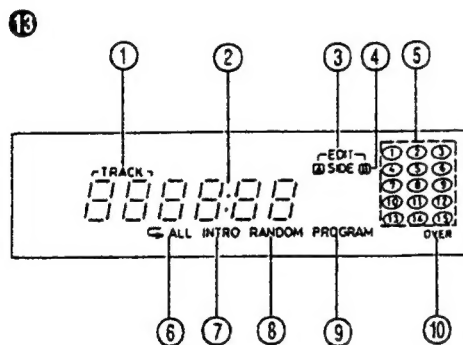
5. Instructions (Extract)

NAMES OF PARTS AND THEIR FUNCTIONS

CD player/General section

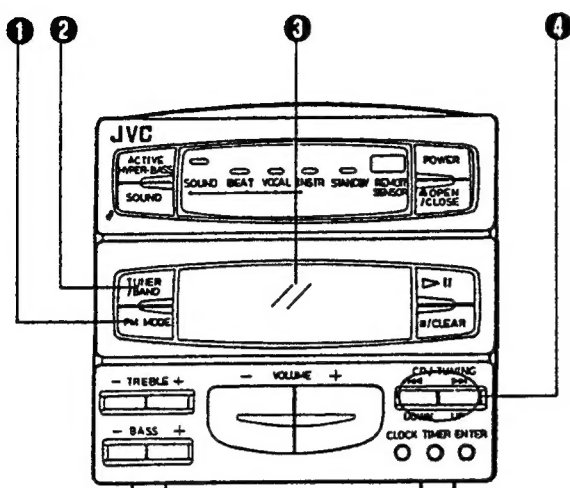


- 1 SOUND button
- 2 ACTIVE HYPER-BASS button
on: The ACTIVE HYPER-BASS indicator will light. Set to this position to listen to the ACTIVE HYPER-BASS sound.
off: The ACTIVE HYPER-BASS indicator goes out. Set to this position when ACTIVE HYPER-BASS sound is not required.
- 3 Active Hyper-Bass indicator
- 4 CD door
- 5 Sound mode indicators (BEAT/VOCAL/INSTR.)
- 6 Power STANDBY indicator
- 7 REMOTE SENSOR section
- 8 POWER button
Press to switch the power on or off.
- 9 CD door OPEN/CLOSE button (Δ)

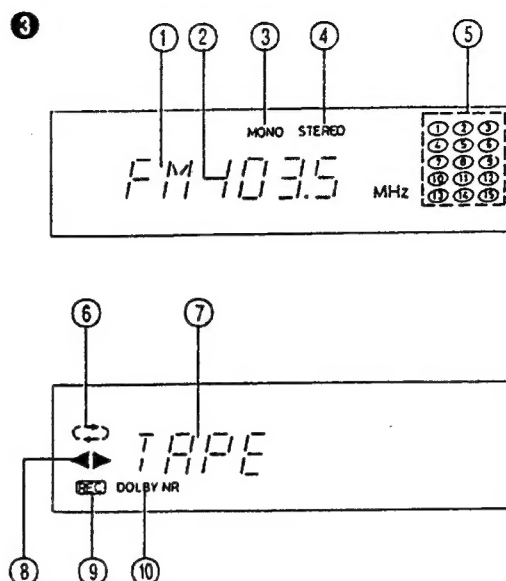
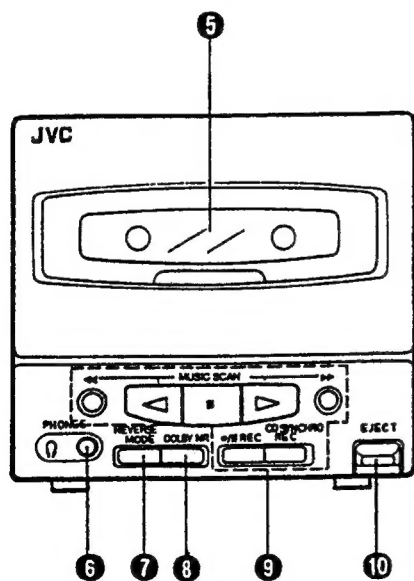


- 10 TREBLE buttons (+, -)
(control range from -6 to 6)
- 11 BASS buttons (+, -)
(control range from -6 to 6)
- 12 VOLUME buttons
+: Use to increase the volume
-: Use to decrease the volume
(control range from VOL 0 to VOL 50)
- 13 Display window
 - 1 Function/Track number display
 - 2 Playback time display
 - 3 EDIT recording mode indicator
 - 4 SIDE (A)/(B) indicator
 - 5 Music calendar display
 - 6 Repeat playback indicator
 - 7 INTRO scan indicator
 - 8 RANDOM playback indicator
 - 9 PROGRAM mode indicator
 - 10 OVER indicator
- 14 CD SEARCH buttons (◀◀, ▶▶):
Press to locate the beginnings of tunes and to start forward and reverse search operations.
- 15 Stop/CLEAR button (■):
Press to stop playing a disc and to cancel programmed playback. This also sets the CD mode.
- 16 Play/pause button (▶||):
Press to play a disc and to stop temporarily.

Tuner/Deck section

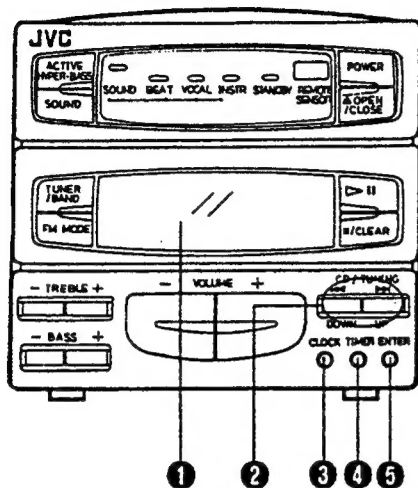


- ❶ FM MODE button
- ❷ TUNER/BAND button
Press to select the tuner mode.
Press to select the band (FM/AM (MW/LW)).
- ❸ Display window
 - ❶ Band indicator (FM/AM (MW/LW))
 - ❷ Radio frequency display
 - ❸ MONO indicator
 - ❹ STEREO indicator
 - ❺ Preset station display
 - ❻ Reverse mode indicator (↔ / ↔ / ↔)
 - ❼ Tape mode display
 - ❽ Tape direction indicator (◀, ▶)
 - ❾ Recording indicator (REC)
 - ❿ DOLBY NR indicator (DOLBY NR)

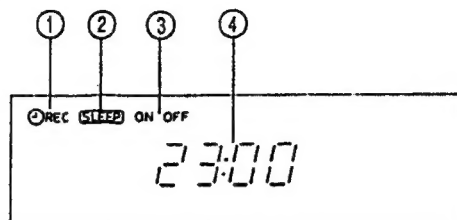


- ❹ Tuning button (UP/DOWN)
- ❺ Cassette holder
- ❻ Headphones jack (PHONES) (3.5 mm dia. stereo mini)
Connect headphones (impedance 16Ω - 1kΩ) to this jack. The speakers are automatically switched off when the headphones are connected.
- ❼ REVERSE MODE switch
 - ↔ : For single-side recording or playback
 - ↔↔ : For both-sides recording or playback
 - ↔↔↔ : For continuous play
- ❽ DOLBY NR button
Set to ON when recording or playing back tapes using the noise reduction system.
- ❹ Cassette operation buttons
 - ⏮ : Press to fast wind the tape from right to left/Music scan.
 - ⏪ : Press to play back the tape in the reverse direction.
 - : Press to stop the tape.
This also sets the TAPE mode.
 - ⏩ : Press to play back the tape in the forward direction.
 - ⏭ : Press to fast wind the tape from left to right/Music scan.
 - /⏸ REC : Press to set the unit to the record or record-pause mode.
 - CD SYNCHRO REC : Press to start CD edit recording/synchro recording.
- ❿ EJECT button

Clock/Timer section



①



- ① Display window
 - ① Timer mode indicator
 - ② SLEEP indicator
 - ③ Timer indicator (ON/OFF)
 - ④ Time display
- ② UP/DOWN buttons
Set the time or timer setting.
- ③ CLOCK button
Set the time and current time displays.
- ④ TIMER button
Set the timer setting or timer ON/OFF (to reset or cancel the timer).
- ⑤ ENTER button
Register the time or timer setting.

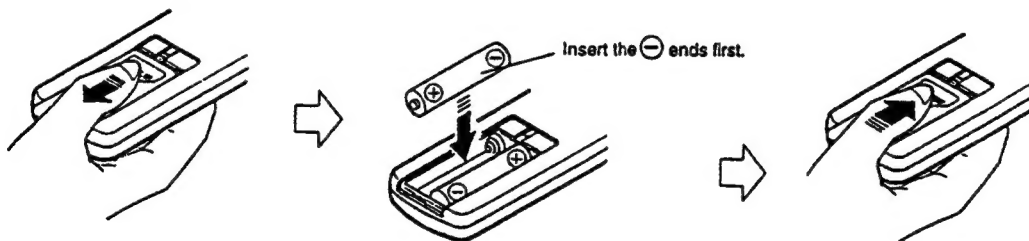
REMOTE CONTROL UNIT

Preparation before use

- Installing batteries in the remote control unit
1. Remove the battery cover from the back of the remote control unit.
 2. Insert two "R6" size batteries.
 - Insert the batteries with the \oplus and \ominus terminals matching the indication inside the battery compartment.

3. Replace the cover.

- Battery replacement
When the remote control operation becomes unstable or the distance from which remote control is possible becomes shorter, replace the batteries with new ones.



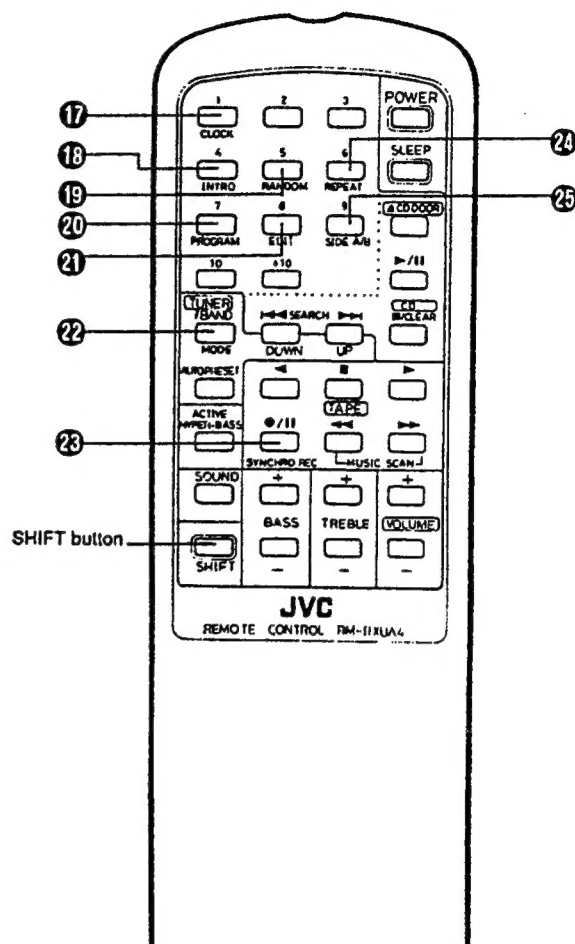
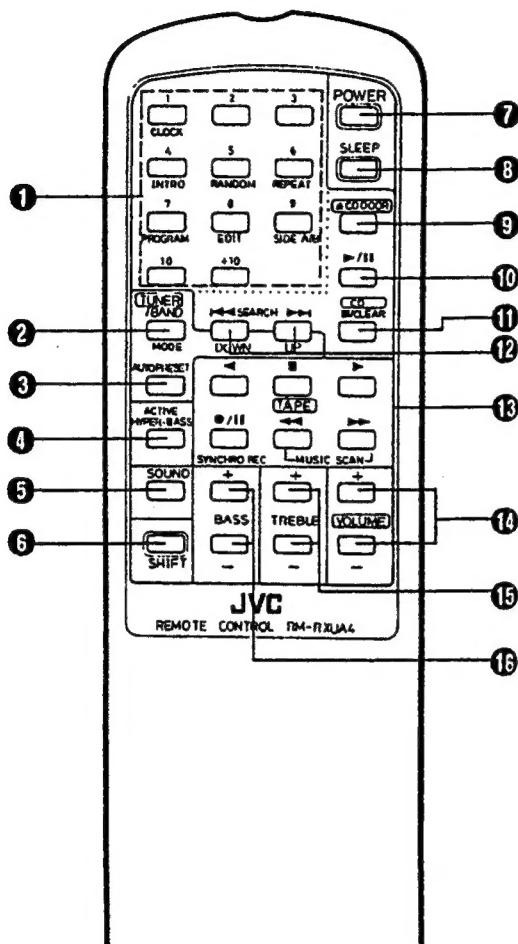
Using the remote control unit












To use the remote control unit, point it at the REMOTE SENSOR and press the buttons gently and firmly. Remote control operation is possible within about 7 m (approx. 23 ft). However, since the remote control range is less when the unit is used at an angle, use directly in front of the REMOTE SENSOR, as far much possible.

Do not expose the REMOTE SENSOR to strong light (direct sunlight or artificial lighting) and make sure that there are no obstacles between the REMOTE SENSOR and the remote control unit.

The following operations can be performed using the remote control unit.

- Check the functions of the operation buttons carefully and operate them correctly.

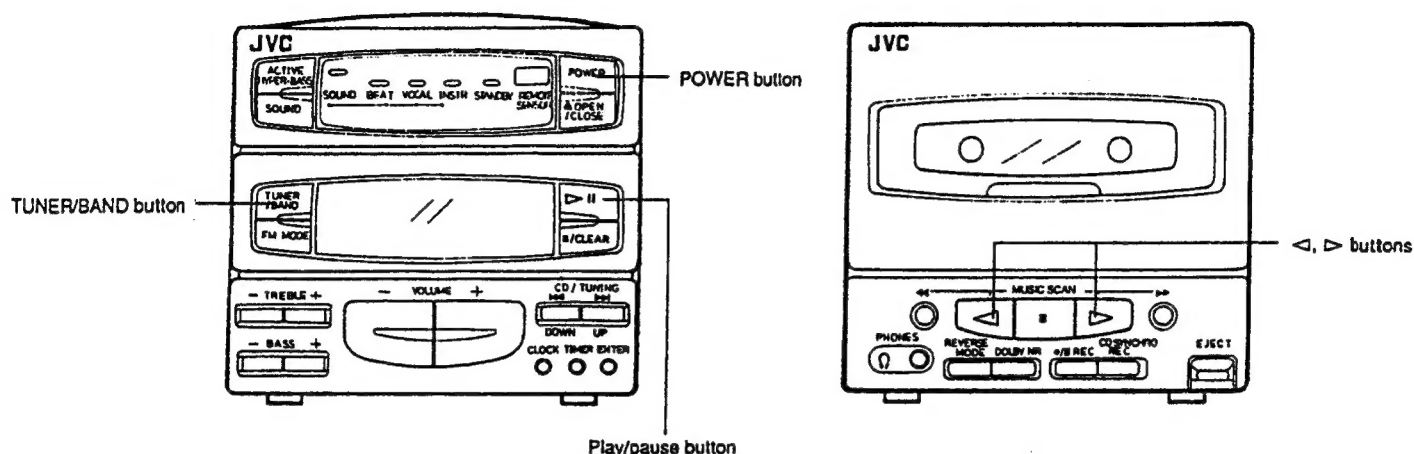


- ① Track (tune) number buttons (No.1 – No.10, +10)
- ② TUNER/BAND button
- ③ AUTO PRESET button
- ④ ACTIVE HYPER-BASS button
- ⑤ SOUND button
- ⑥ SHIFT button
- ⑦ POWER button
- ⑧ SLEEP button
- ⑨ CD DOOR button ()
- ⑩ CD /II: CD mode/play/pause button
- ⑪ /CLEAR: stop/clear button
- ⑫ CD SEARCH/DOWN and UP button (, )
 - In the CD mode, to scan to the beginning of a tune and to start forward or reverse search.
 - In the tuner mode, to tune to broadcasts.
- ⑬ Cassette operation buttons
 -  : Play button (reverse direction of tape)
 -  : Stop button
 -  : Play button (forward direction of tape)
 -  : Record/Record-pause button
 -  : Fast wind (from right to left)/Music scan button
 -  : Fast wind (from left to right)/Music scan button
- ⑭ VOLUME buttons (+, -)
- ⑮ TREBLE buttons (+, -)
- ⑯ BASS buttons (+, -)

Press the following buttons while holding down the SHIFT button ⑥.

- ⑰ CLOCK button
Use to display a current time.
- ⑱ INTRO button
- ⑲ RANDOM button
- ⑳ PROGRAM button
- ㉑ EDIT button
- ㉒ MODE (STEREO AUTO/MONO) button
- ㉓ SYNCHRO REC button
- ㉔ REPEAT button
- ㉕ SIDE A/B button

SWITCHING THE POWER ON/OFF



Switching the power on/off

• Switching on:



- The indicator in the display window lights.

COMPU PLAY

Even when the power is set to STANDBY, pressing the button shown below switches on the power and selects the source.

	Function mode
	CD
	TAPE
	TUNER

When the CD door OPEN/CLOSE button (▲) is pressed, the source sound does not switched over, the CD door can open or close.

Notes:

1. When switching off the power, be sure to press the power button.
2. The COMPU PLAY button on the remote control has the same function as the UX-A4.
3. When the CD door opens and the Play/pause (>||) button is pressed, the CD door closes and the CD play starts.

• Switching off:



- The indicator in the display window goes out and only the clock is indicated.

Operations

When this button is pressed with a CD loaded, CD playback begins.

When this button is pressed with a tape loaded, tape playback begins.

When this button is pressed, the tuner is engaged

Sound mode button

The UX-A4 has three preset sound modes (BEAT, VOCAL, INSTR.). These modes can be selected to enhance the type of music being played.

- Press the SOUND button to select Sound mode. Each time the SOUND button is pressed, Sound mode changes as follows;



No display mode → BEAT → VOCAL → INSTR.



- When INSTR. mode is selected, Active-Hyper Bass sound is automatically switched ON.

Sound mode selection

BEAT:

Set to this position for music with a heavy beat, such as rock or disco music.

VOCAL:

Set to "VOCAL" for popular or vocal music.

INSTR.:

Select this position for background and instrumental music.

Note:

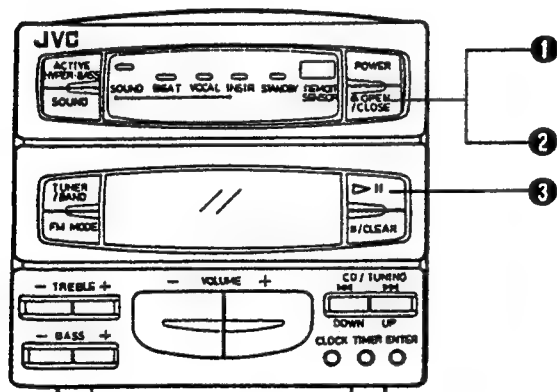
When the BASS or TREBLE button is pressed in any sound mode, No Display mode is selected automatically.

PLAYING COMPACT DISCS



Playing an entire disc ... The following example assumes a compact disc with 12 tunes and a total playing time of 48 minutes 57 seconds.

Operate in the order shown



- Press to open the CD door. (The power is switched on.)
- Load a disc with the label side facing up. Press to close the CD door. (The door can be closed by pressing the $\triangleright \parallel$ button.)
- Press to start play.
 - As tunes are played, their track numbers go out one by one.

- After loading a CD, simply press the $\triangleright \parallel$ button to switch on the power and start CD playback.

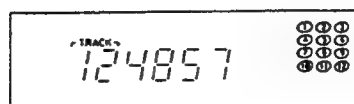
- 8-cm (3-3/16") compact discs can be used in this unit without an adapter.

Note:

When the CD door is closed by pressing the $\triangleright \parallel$ button, the CD starts as soon as the CD door is closed.

To stop play

- To stop in the middle of a disc**
During playback, press the \blacksquare /CLEAR button to stop play.



- To stop a disc temporarily**
Press the $\triangleright \parallel$ button to stop play temporarily and the playing time blinks. When pressed again, play resumes from the point where it was paused.

Caution:

- To change discs, press the \blacksquare /CLEAR button; check that the disc has stopped rotating completely before unloading it.

- The total number of tracks (tunes) and total playing time are displayed.

Notes:

- The following indication may be shown when a disc is dirty or scratched, or when the disc is loaded upside down.
In such a case, check the disc and insert again after cleaning the disc or turning it over.



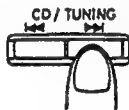
- Do not use the unit at excessive high or cold temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- After playback, unload the disc and close the CD door.
- If mistracking occurs during play, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i.e. in a car travelling on a rough road).

Skip playback

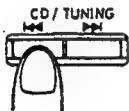
- During playback, it is possible to skip forward to the beginning of the next tune or back to the beginning of the tune being played or the previous tune; when the beginning of the required tune has been located, play starts automatically.

To listen to the next tune ...

Press the ► button once to skip to the beginning of the next tune.

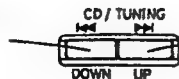
**To listen to the previous tune ...**

Press the ◀ button to skip to the beginning of the tune being played back and press again to skip to the beginning of the previous tune.

**Search playback
(to locate the required position on the disc)**

- The required position can be located using fast-forward or reverse search while playing a disc.

Keep pressing for fast-reverse search

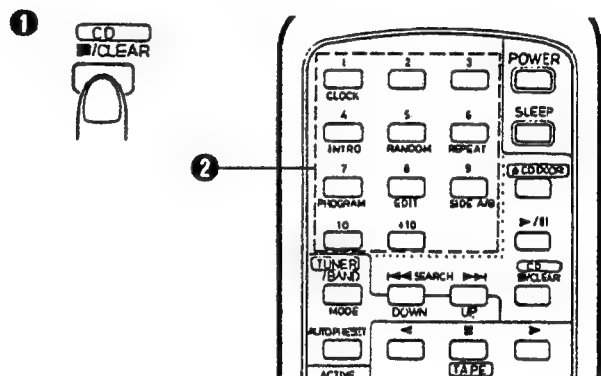


Keep pressing for fast-forward search

- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

Direct access playback (using the remote control)

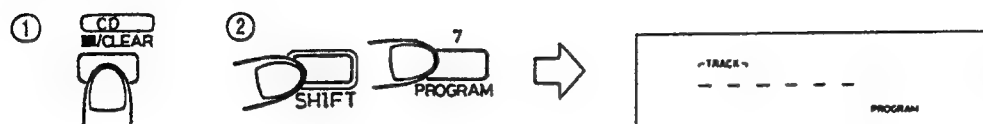
- Pressing any of the track number buttons will start play from the beginning of the designated tune, without your having to press the CD ►/II button. (This function cannot be used during programmed play.)



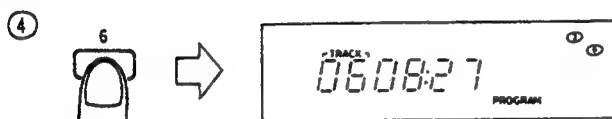
- Press the ■/CLEAR button to set to the CD mode.
- Designate the required tune using the track number buttons.
 - To designate tune numbers 1 to 10, press the track number button corresponding to the tune (track) number.
 - To designate tune number 11 or higher, press the +10 button the required number of times, then the track number button. (Example: To designate the 20th tune, press the +10 button once, then press track number button 10.)
- +10 button:
 - Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the track number button to set the 1's digit.
- To skip to another tune during play
 - When the required track number button is pressed, the display shows the designated track number and play starts from the beginning of the designated tune.

Programmed play (using the remote control)

- Up to 20 tunes can be programmed to be played in any required order.
The total playing time of programmed tunes is displayed (up to 99 minutes, 59 seconds).
(Example: When programming the 2nd tune to be played first, the 6th tune next, and then the 12th tune, etc.)



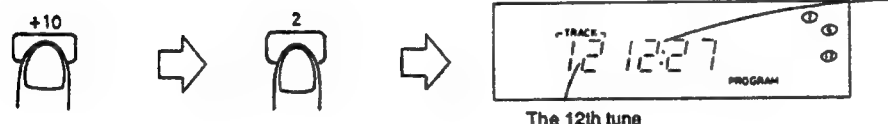
To designate the 2nd tune.



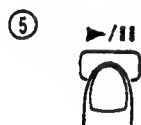
- Press the CD button.
- Press the PROGRAM button while pressing the SHIFT button to set to the programming mode.
- Press to designate the required track number.
- Designate the remaining tunes by pressing the track number buttons.
- Press the ►/II button when programming is completed. Programmed playback starts.

To clear the programmed tunes ...
Press the CD button before playing a disc. During programmed playback, press this button twice. When the CD door is opened, programmed tunes are cleared automatically.

To designate the 12th tune.



The 12th tune



To confirm the details of a program...

Press the PROGRAM button while pressing the SHIFT button; the tunes making up the program will be displayed in programmed order.



Tune number



Program order number

Notes:

- If the total playing time of the programmed tunes exceeds 99 minutes 59 seconds, the total playing time indication will go out.
- Programming 21 or more tunes is impossible.
- When a disc with 16 or more tunes is loaded, the "OVER" indicator will appear.
- When a track number that is higher than 21 is programmed for a disc which contains more than 21 tunes, the track No. is displayed, however, "--:--" is shown in the total playback time.
- When performing timer playback in the order of "Programmed play", step ① above is not required.

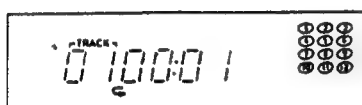
Repeat play (using the remote control)

Press the REPEAT button while pressing the SHIFT button before or during play. A single tune or all the tunes can be repeated.

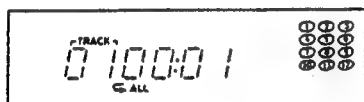
Whether a single tune or all tunes are to be repeated can be specified. Each time the REPEAT button is pressed while pressing the SHIFT button, the mode will change from a single tune (), to all the tunes (), to the clear mode, in this order.



- Repeat playback of a single tune ()
The tune being played back will be heard repeatedly.



- Repeat playback of all tunes ()
When playing back an entire disc or programmed tunes, all tunes or the programmed tunes will be heard repeatedly.



Random playback (using the remote control)

Press the RANDOM button while pressing the SHIFT button, all tunes on a disc are played once, in random order.



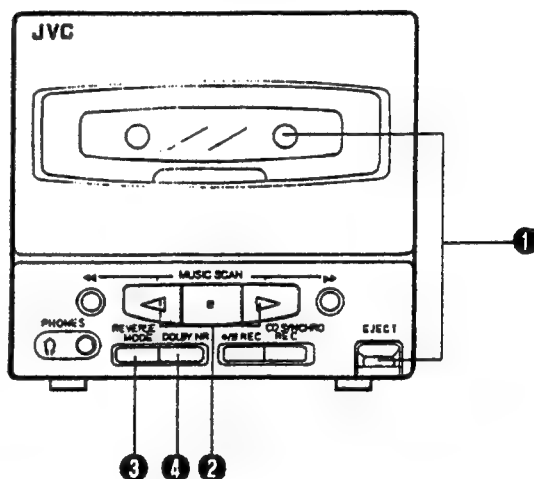
INTRO scan operation (using the remote control)








- Simply press the INTRO scan button while pressing the SHIFT button to play the first 15 seconds of each tune. The operation is released after playing the introductions of all tunes or all programmed tunes.
- If the INTRO scan button is pressed in the middle of a tune while pressing the SHIFT button, the intro scan operation will start from the next tune.
- To release the intro scan mode, press the INTRO scan button again while pressing the SHIFT button and normal playback (or programmed playback) will resume.



CASSETTE PLAYBACK

Operate in the order shown



- 1 Load a cassette tape with side A facing out.
 - 2 Press to start playback. (The power is switched on and the TAPE mode is engaged to start the tape playback.)
 - 3 Select the reverse mode ( /  / ).
 - 4 Set the DOLBY NR switch as required.
- After loading a cassette tape, simply press the  or  button. The power is switched on and the tape starts playback.
 - When the tape is played back with the reverse mode set to the  (single side play) or  (both side play) mode, the tape stops automatically at the end of tape after playing one side or both sides.

Music scan

- The beginning of the current tune or the next tune can be located using the music scan facility.

- Press the \triangleright or \triangleleft button for tape playback.
- Press the $\triangleright\triangleright$ or $\triangleleft\triangleleft$ button for music scan.

- When music scanning is completed, playback will start automatically.
 - To skip two tunes or more, repeat the above steps ② and ③.

Notes:

With the following types of tape, the Music Scan mechanism may not operate correctly. This is not a malfunction; use the Music Scan facility only with suitable tapes.

- Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portion during tunes.
- Tapes with short non-recorded sections.
- Tapes with high-level noise or hum between tunes.

- To the start of the next tune

- To the start of the tune being played back

(Forward \triangleright) direction playback



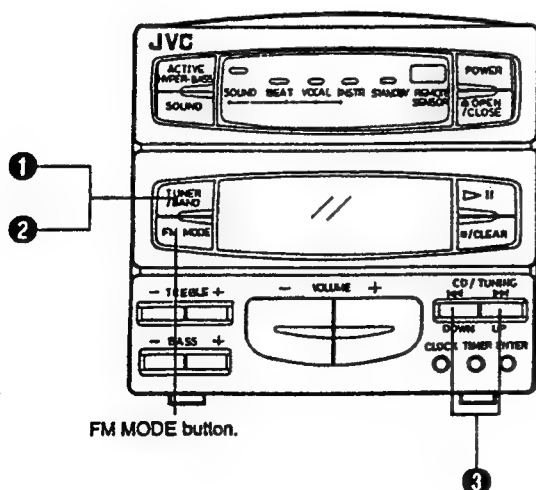
(Reverse \triangleleft) direction playback



The tape direction indicators blink during music scanning.

RADIO RECEPTION

Operate in the order shown



- Press the TUNER/BAND button.
 - The power is switched on and a band and radio frequency will be shown in the display.
- Select the band (FM or AM (MW/LW)).
- Tune to the required station.

FM MODE button

AUTO:

Set to this position when listening to or recording an FM stereo broadcast. The STEREO indicator lights when the FM stereo broadcast is received.

MONO:

Set to this position when FM stereo reception is noisy.

Seek tuning

Press the UP or DOWN button for one second or more; the unit enters the seek tuning mode and tunes to higher or lower frequencies, and when the broadcast is received, it stops tuning automatically and the broadcast can be heard.

In AM operation, the frequency moves continuously from the MW to the LW band and vice versa.

• Manual tuning

Each time the UP or DOWN button is pressed, the unit steps through the current frequency band. Tuning is in steps of 50 kHz for FM and 9 kHz for AM (MW/LW). In AM operation, the frequency moves continuously from the MW (522 - 1,629 kHz) to the LW (144 - 288 kHz) band and vice versa.



Auto preset tuning (using the remote control unit)

This function scans the current band (FM or AM (MW/LW)), detecting frequencies used to broadcast signals, and stores the first 15 frequencies in memory automatically.

- Press the AUTO PRESET button. The frequencies of stations broadcasting signals can be preset automatically in the order of increasing frequency. (15 stations in each band (FM and AM (MW/LW))).

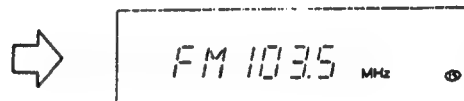
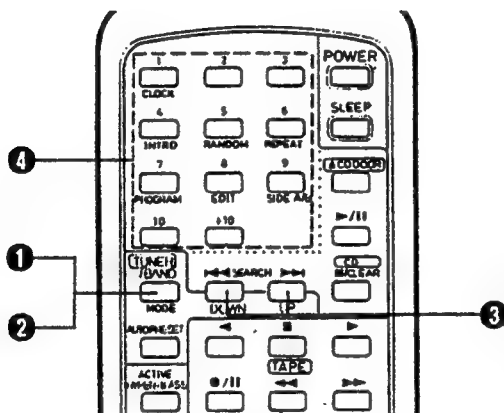
Notes:

- When seek tuning to the required station is not possible because it is broadcasting too weak a signal, press the UP or DOWN button momentarily to perform manual tuning.
- When the power is set to STANDBY, or another mode (TAPE or CD) is selected, the last tuned frequency is stored in memory. When the power is switched on again and TUNER/BAND button is pressed, the same station will be heard.

Presetting stations (using the remote control unit)

15 stations in each band (FM and AM (MW/LW)) can be preset as follows:

- Example (when presetting an FM station broadcasting at 103.5 MHz to preset button "15")



- 1 Press the TUNER/BAND button.
- 2 Select the FM band using the TUNER/BAND button.
- 3 Tune to the required station.
- 4 Press preset button "+10", then "5" for more than 2 sec. (When "15" blinks in the preset station display, the station has been preset.)

- Repeat the above procedure for each of the other stations, using a different preset button each time.
- Repeat the above procedure for the AM (MW/LW) band.

- To change preset stations
Perform step ① above after tuning to the required station.

Notes:

- The previous preset station is erased when a new station is set as the new station's frequency replaces the previous frequency in memory.
- When listening to an AM (MW/LW) broadcast, noise may be heard if the remote control is used.
- All preset stations will be erased when the power cord is disconnected or a power failure occurs for more than 24 hours. In such cases, preset them again.

Preset tuning (using the remote control unit)

- ① Press the TUNER/BAND button
 - ② Select the band (FM or AM (MW/LW)) using the TUNER/BAND button.
 - ③ Press the required preset station buttons (No.1 - No.10, +10).
- The preset station number and frequency corresponding to the button pressed are shown.

Using the antennas

FM: Connect the provided FM feeder antenna (see page 7).

AM (MW/LW): Adjust the position of AM (MW/LW) loop antenna.

RECORDING



- In recording, the ALC circuit automatically optimizes the recording level; adjustment of the recording level is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

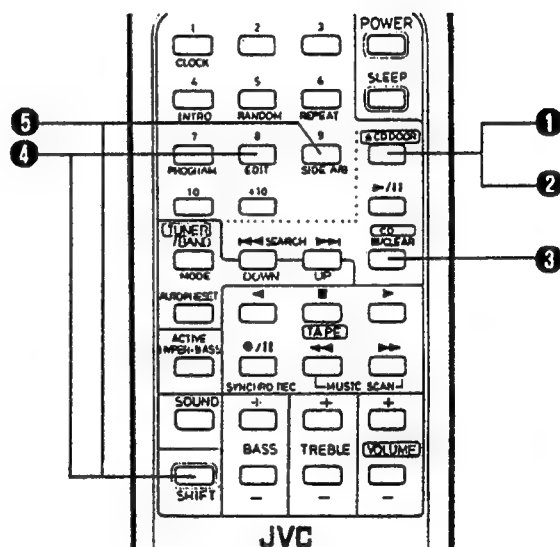
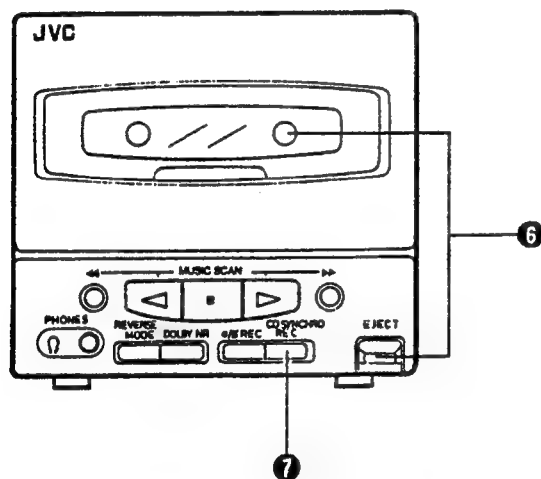
Notes:

This unit has recording characteristics suitable for normal and CrO₂ tapes. Normal and CrO₂ tapes have different characteristics from metal tape.

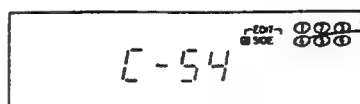
CD edit recording (for CDs with up to 20 tunes)

- By checking the total playing time of the CD, a microcomputer in the unit automatically calculates the optimum length (recording time) of the tape to be used, displays the required tape length, and divides the tunes on the disc into two groups to be recorded on the two sides of the tape so as to minimize tape waste.

Operate in the order shown

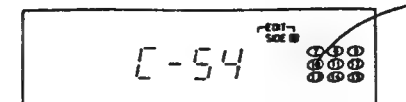


- 1 Press to open the CD door. (The power is switched on.)
- 2 Load a disc and press to close the CD door.
- 3 Set to the CD mode.
- 4 Press the EDIT button while pressing the SHIFT button.



The tune numbers recorded on side A appear.

- 5 Press the SIDE A/B button while pressing the SHIFT button.



The tune numbers recorded on side B appear.

- ⑥ Insert a cassette with a suitable length (recording time) with side A facing out.
 - The tape length can be set from the remote control. (See below.)
- ⑦ Press the CD SYNCHRO REC button to start CD edit recording.
 - Recording starts in the forward direction (on the side facing out).
 - During edit recording, the leader tape section (approx first 10 sec.) is wound automatically and then recording starts. The reverse mode is set to \rightleftarrows mode automatically.
- The tape stops automatically when the CD has been played.
- To change the tape length (recording time)

When the EDIT button is pressed while pressing the SHIFT button with a CD loaded, the tape length required to record the entire disc is displayed (C-46, C-54, C-60, C-74 or C-90).

At this time, the displayed tape length can be changed by pressing the track number buttons.

Example: To change to C-50

Press the +10 button four times, and within 10 seconds, press the 10 button.

When the length of the tape is changed, some of the tunes that were to be recorded on side A may be indicated as to be recorded on side B or vice versa, according to the tape length specified.

Depending on the tape length specified, some tunes may not be recorded on the tape. Set the tape length (recording time) so that the entire disc can be recorded.

- When editing a disc with 16 to 20 tunes
CD editing can be used to record discs containing up to 20 tunes, however, the music calendar shows up to only 15 tunes.
As the 16th to 20th tunes will not appear in the music calendar display (the "OVER" indicator will light), be sure to check the tunes you have recorded after completing editing.
- Set the DOLBY NR as required. The DOLBY NR indicator lights.

Note:

The optimum sound quality will not be obtained if different DOLBY NR switch settings are used during recording and playback.

Notes:

- When a disc with 21 tunes or more is loaded, "C---" will appear in the display. In such a case, set the required tape length using the track number buttons on the remote control.
- In CD edit recording blanks of approx. 4 seconds will automatically be left between tunes on the recorded tape.

When automatic spacing between tunes is not required ...

Perform the following.

1. Press the $\triangleright \parallel$ button of the CD player twice. The CD Player enters the pause mode.
2. Press the CD SYNCHRO REC button to start recording.

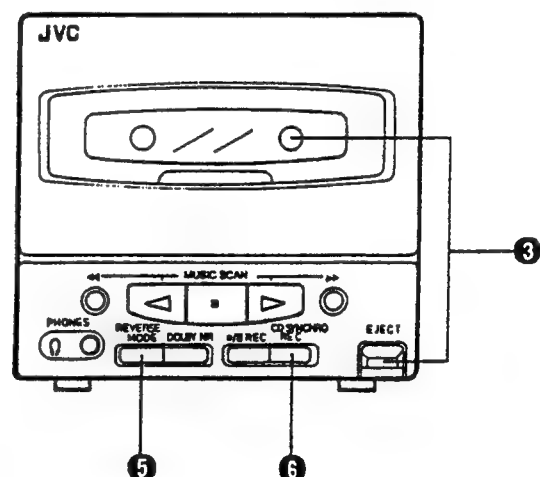
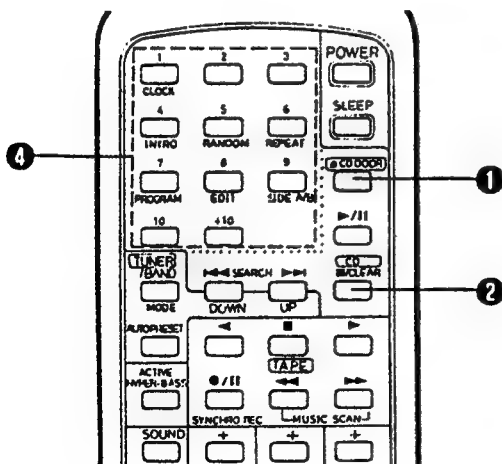
Note:

- Depending on the disc used, blanks of a specified length may be left between tunes
- After use
Press the \blacksquare /CLEAR button to release the CD edit recording mode. (The CD edit recording mode is also released when the CD door is open.)

Synchronized recording with the CD player

- In this system, the CD player starts playback when the cassette deck enters the recording mode.

Operate in the order shown



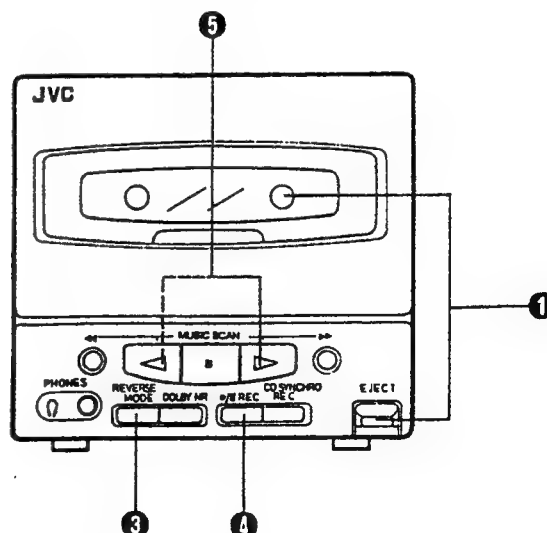
- ① Load a disc and close the CD door. (The power is switched on.)
 - ② Set to the CD mode.
 - ③ Load a cassette with side A facing out. (Wind past the leader tape before starting recording.)
 - ④ When programmed playback is required, program the required tunes using the remote control. (See page 27.)
 - Select tunes with a total playing time which does not exceed the tape length.
 - ⑤ Select the required reverse mode (\rightleftarrows or \rightarrow)
 - ⑥ Press the CD SYNCHRO REC button; synchronized recording will start.
- Recording starts in the forward direction and CD play starts automatically.

- Note:**
- During CD edit recording and synchro recording, the PAUSE and SEARCH buttons do not function.

Operate in the order shown

- ## Erasing

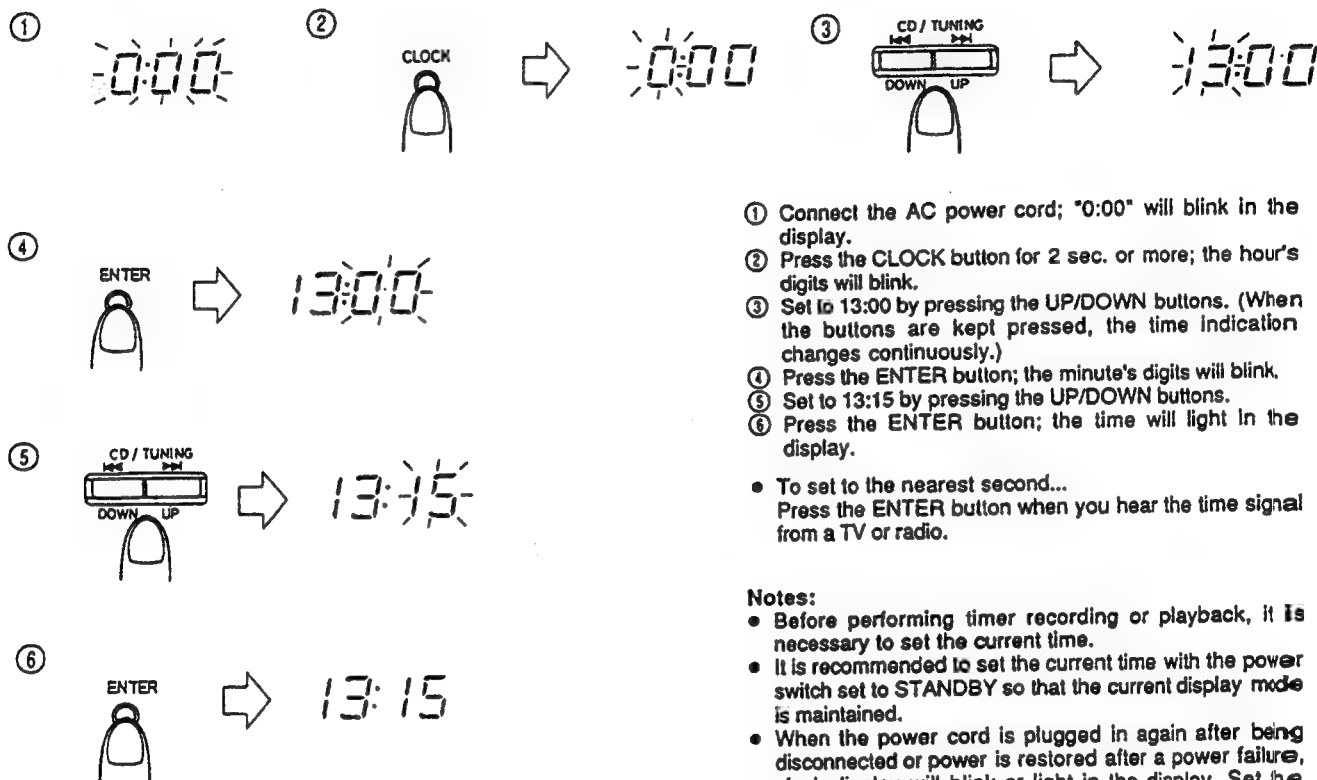
It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.



CLOCK/TIMER ADJUSTMENT

Setting the current time (when the UX-A4 is used for the first time)

(Example: to set the clock to 13:15.)



- ① Connect the AC power cord; "0:00" will blink in the display.
- ② Press the CLOCK button for 2 sec. or more; the hour's digits will blink.
- ③ Set to 13:00 by pressing the UP/DOWN buttons. (When the buttons are kept pressed, the time indication changes continuously.)
- ④ Press the ENTER button; the minute's digits will blink.
- ⑤ Set to 13:15 by pressing the UP/DOWN buttons.
- ⑥ Press the ENTER button; the time will light in the display.

- To set to the nearest second...
Press the ENTER button when you hear the time signal from a TV or radio.

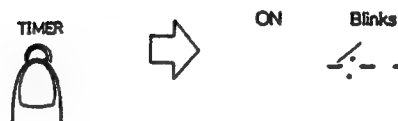
Notes:

- Before performing timer recording or playback, it is necessary to set the current time.
- It is recommended to set the current time with the power switch set to STANDBY so that the current display mode is maintained.
- When the power cord is plugged in again after being disconnected or power is restored after a power failure, clock display will blink or light in the display. Set the current time again.

Setting the timer

- The current time must be set before the timer can be used.

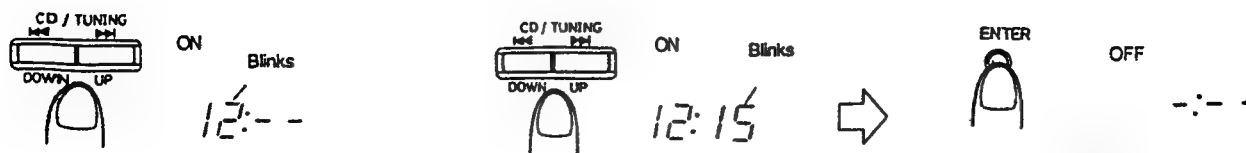
- ① Press the TIMER button.



- ② Set the start time
(Example: when the timer start time is set to 12:15.)

- ① Adjust the hours.

- ② Adjust the minutes.

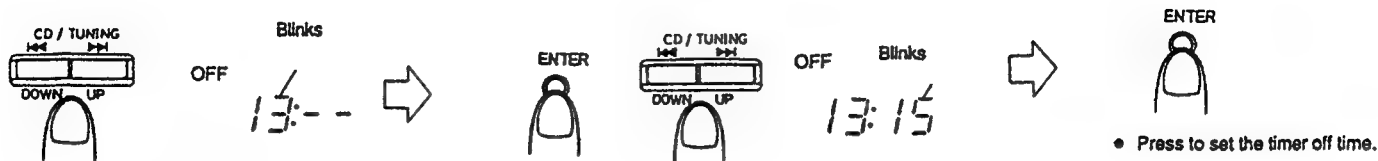


- Press to set the start time.

③ Set the stop time (Example: when the timer stop time is set to 13:15.)

① Adjust the hours.

② Adjust the minutes.



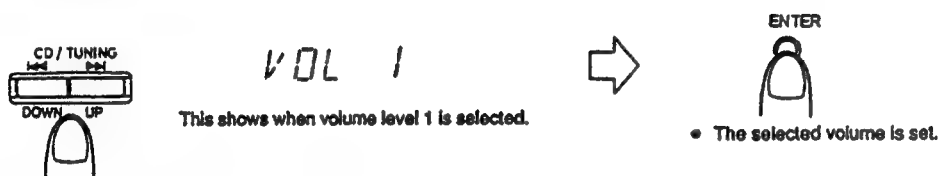
④ Select the TIMER mode.



Blinks
VOL 1

When the UP button is pressed to select the timer mode, the mode changes from the, CD (timer playback of a CD), TAPE (timer playback of a tape), TUNER (timer reception of a broadcast) to TUNER/REC (timer recording of a broadcast), in this order.

⑤ Set the volume.



The playback level is determined by the position of VOLUME control.

When the UP button is used to select the volume.



The volume decreases to zero at the timer start time, and the sound fades in.

- The unit enter the previously engaged mode and timer setting is complete.
- To check the timer setting
 1. Press the TIMER button.
 2. Press the ENTER button to check the timer mode.
 3. When the previous engaged mode is displayed, timer setting has been completed.

Notes:

- When the timer is set incorrectly or the correct mode is not selected, perform "Setting the timer" from the beginning.
- When the timer is set, "--:" in the display is replaced by the input digits.
- When the timer stop time is not set, the timer operates for 2 hours and then the unit is switched off. To continue listening after the timer stop time, display the timer stop time, change the hours digits to "--:" using the UP button and press the ENTER button.

TIMER OPERATIONS

Timer recording of broadcast


- The current time must be set correctly before you set timer recording.
- Make sure that the erase protection tabs of the cassette have not been broken off.

Operations

1. Set the POWER button to ON.
2. Load a cassette.
 - Insert the cassette with the side to be recorded facing out.
 - Set the reverse mode button to "↔" or "⇄" and set the DOLBY NR button as required.
3. Set the timer start and stop times, set the timer recording mode, then set the required volume, in this order. (Refer to "Setting the timer" on page 46.)
 - Set the timer about a minute before the broadcast to be recorded is scheduled to start.
4. Tune to the station to be recorded. (Refer to page 34.)
5. Set the POWER button to STANDBY.

- Timer recording will start at preset start time and the power will be switched off at preset stop time. When timer recording is completed, the timer mode is switched to the "TUNER" (timer reception of broadcast) mode.

To cancel timer operation

Press the TIMER button so that the timer mode indicator () goes out.

If you do this, timer recording will not start at the timer start time.

Notes:

Once the timer has been set, the start and stop times, etc., are stored in memory. When timer recording or playback is required at different times, the timer must be set again.

- After setting the timer start and stop times, check that the unit is tuned to the required frequency.
- When the power cord is disconnected or there is a power failure, timer settings will be erased from memory. If this happens, set the current time and perform the timer setting again.

Timer playback

- Timer playback of tapes, broadcasts and CDs is possible.

Operations

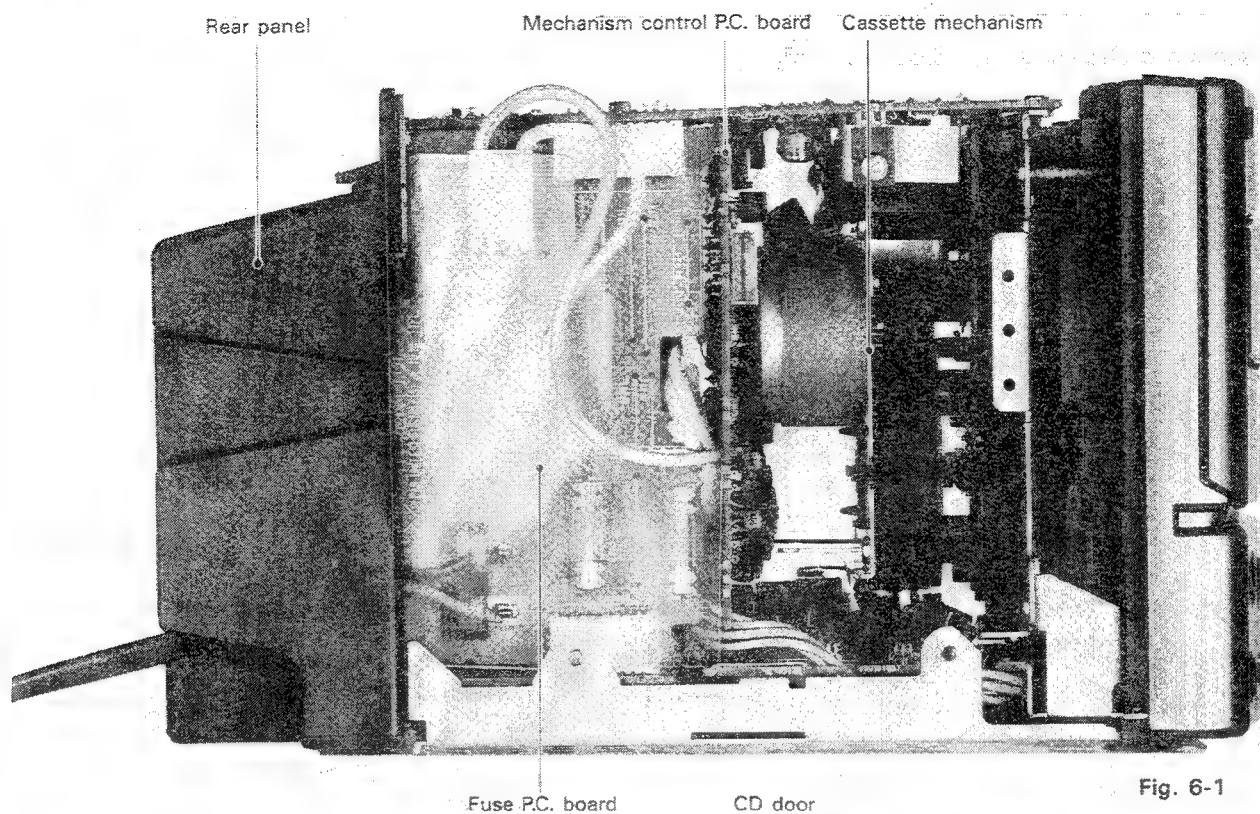
1. Set the POWER switch to ON.
2. Set the timer start and stop times, set the timer playback mode, then set the volume, in this order. (Refer to "Setting the timer" on page 46.)

Source sound	Timer mode	Operations
CD play	CD	Load a disc.
Tape playback	TAPE	Load a cassette tape.
Broadcast	TUNER	—

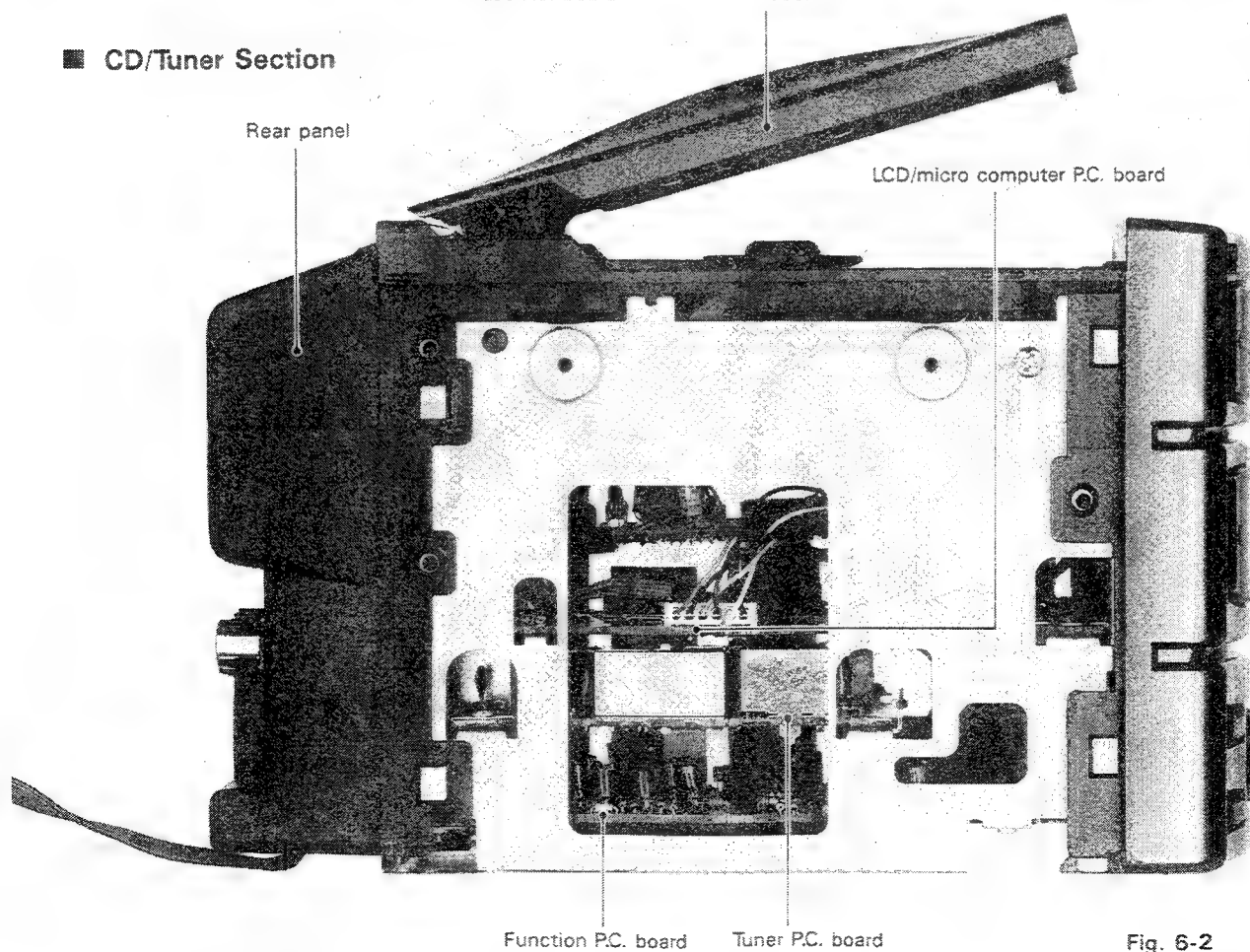
- Timer playback of a CD is possible in programmed order. (See page 27.)
 - The volume can be set to 50 different levels.
3. Tune to the required frequency when the timer playback of a broadcast is to be performed.
 4. Switch the power off.
- Timer playback will start at the timer start time and the power will be switched off at the timer stop time. The unit remains in the same timer mode even after the power is switched off and the same timer function will be repeated at the same time on the following day.

6. Location of Main Parts

■ Tape Deck/Amplifier Section



■ CD/Tuner Section



7. Removal of Main Parts and Analytic Drawing

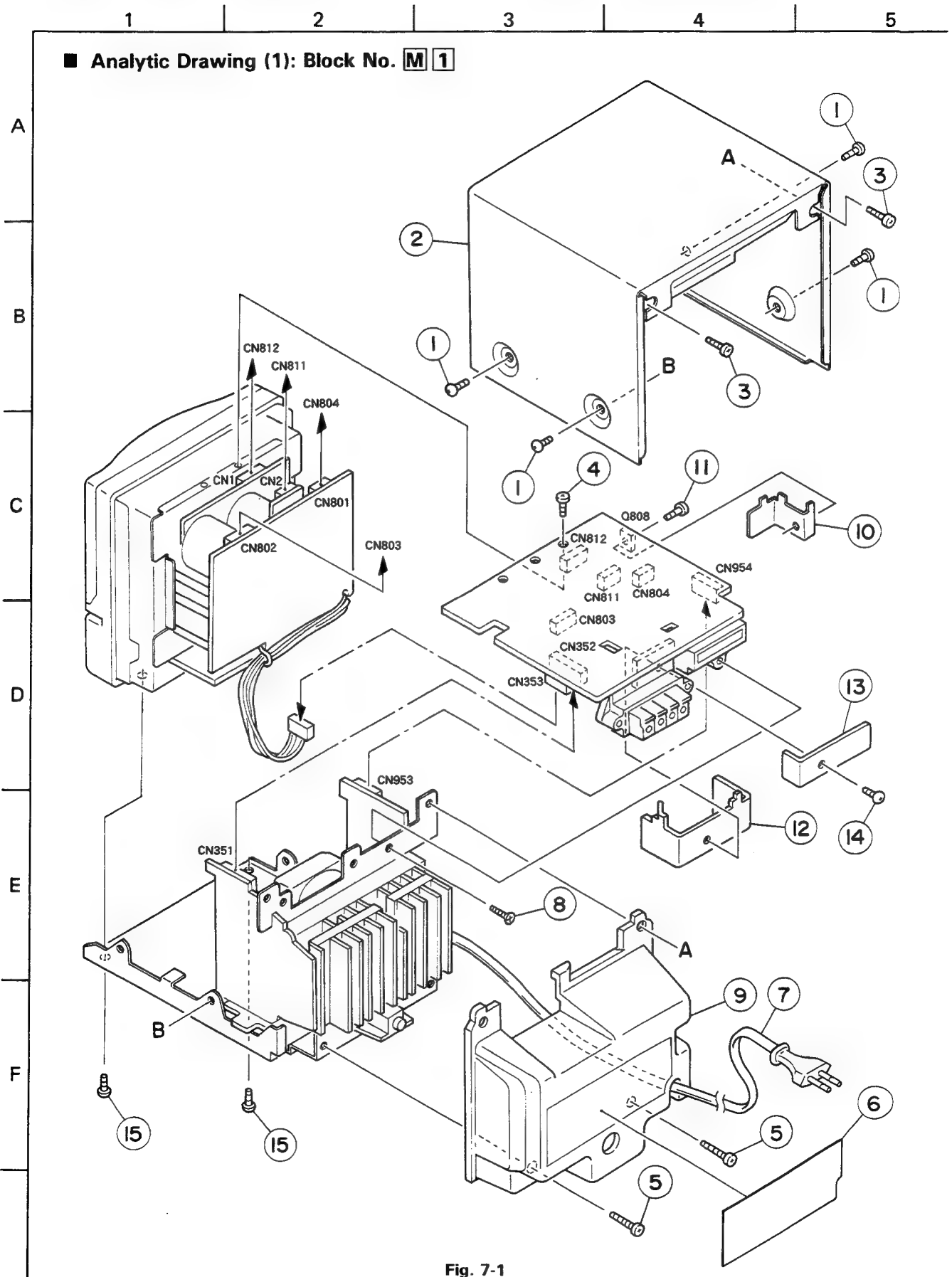


Fig. 7-1

■ Separation of Front Panel Ass'y and Power Supply Unit Ass'y

1. Remove the four screws ① retaining the right and left sides of the top cover from the body.
2. Remove the two screws ③ retaining the rear side of the top cover.
3. Remove the two screws ⑤ retaining the rear panel from the body.
4. Remove the one screw ⑧ retaining the mechanism control speaker terminal P.C. board from the transformer bracket.
5. From the front panel ass'y, remove the one screw ④ retaining the mechanism control speaker terminal P.C. board.
6. After raising (floating) the mechanism control P.C. board upward, dismount the connectors CN954, CN353, CN352, CN812, CN803, CN804 and CN811 on the mechanism control P.C. board respectively from the connector CN953 on the fuse P.C. board, connector CN351 on the power amplifier P.C. board and connector CN1 on the leaf switch P.C. board, connectors CN801 and CN802 on the pre-amplifier P.C. board, and connector CN2 on the actuator reel motor P.C. board.
7. Remove the two screws ⑮ retaining the front panel ass'y from the bottom side of the body.
8. Separate the front panel ass'y and power supply unit ass'y.

■ Analytic Drawing (1) Parts List

BLOCK NO. **M1MM** [] [] [] []

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	SDST3006M	SCREW		4		
	2	VJC2412-003	TOP COVER		1		
	3	SDST3008M	SCREW		2		
	4	SBST3006Z	SCREW	FRONT+BOTTOM	2		
	5	SDST3010N	SCREW	REAR	2		
△	6	VYN9214-S002	NAME PLATE		1	B	
△		VYN9214-S015	NAME PLATE		1	EN	
△		VYN9214-S108	NAME PLATE		1	GI	
△		VYN9214-008	NAME PLATE		1	G	
△		VYN9214-005	NAME PLATE		1	E	
	7	GMP5530-0085BS	POWER CORD		1	B	
		GMP3900-200	POWER CORD	AC P. CORD	1	E,G,GI,EN	
	8	SSSF3008Z	SCREW	JACK HOLDER+JAC	1		
	9	VJG1125-104	REAR PANEL (D)		1		
	10	VMH4049-001	HEAT SINK		1		
	11	SDST2608Z	SCREW		1		
	12	VMH4047-002	HEAT SINK	FOR DIODE	1		
	13	VMH4048-001	HEAT SINK		1		
	14	SBSF3012Z	SCREW		1		
	15	SDST2606Z	SCREW	PCB+MECHA.	2		

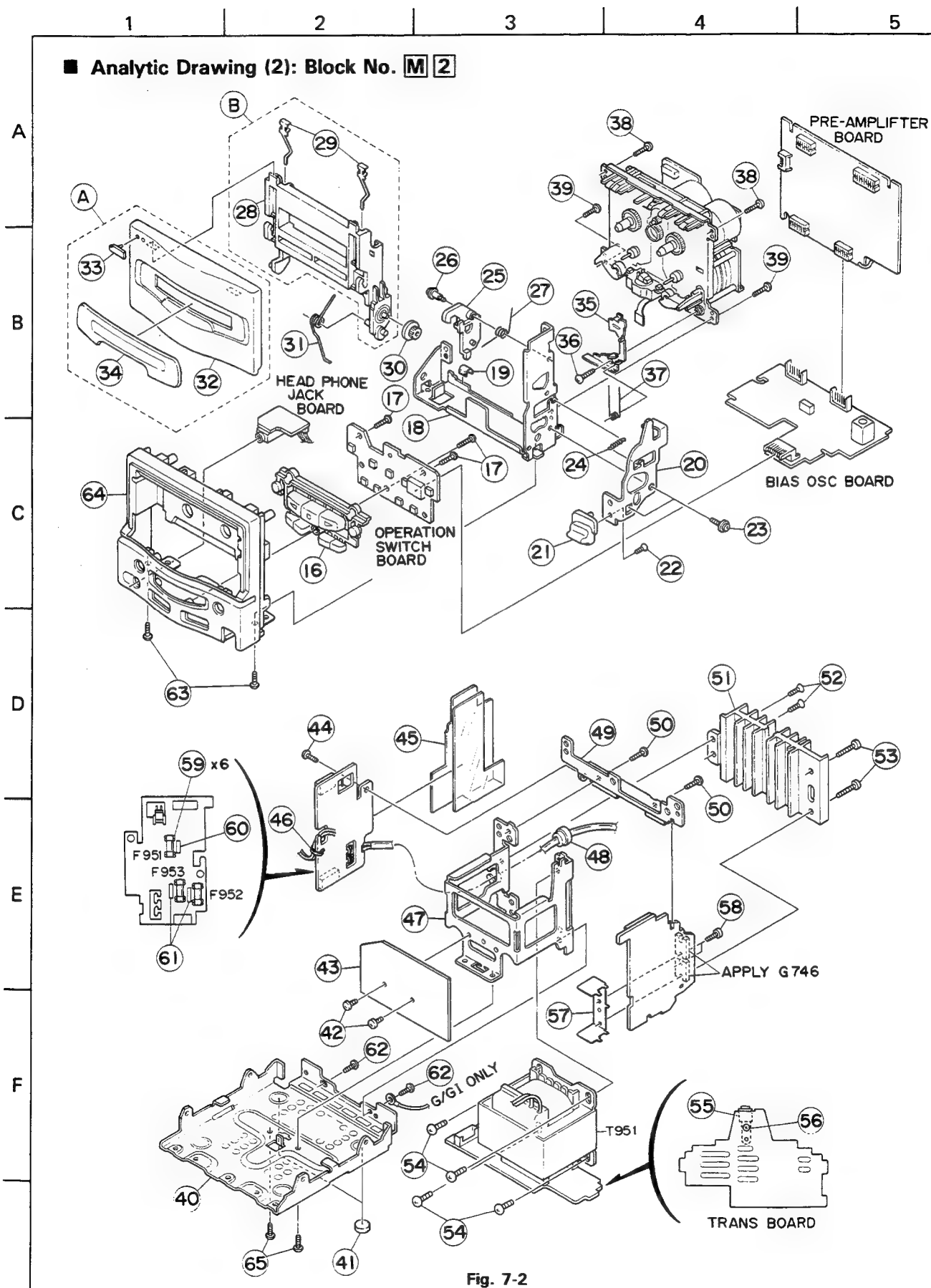


Fig. 7-2

■ Analytic Drawing (2) Parts List

BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	ZCUXDA4K-CLB	CASSETTE LID	REF.32-34	1		
B	ZCUXDA4K-CH	CASSETTE HOLDER	REF.28,29	1		
16	VXP3602-001	BUTTON		1		
17	SBSF2608Z	SCREW	FRONT+SW BOARD	3		
18	VYH3787-001	HOLDER		1		
19	VYSA1R4-059	SPACER	HOLDER	1		
20	VYH7817-001	EJECT LEVER		1		
21	VXQ4118-001	EJECT KNOB		1		
22	SDSF2608Z	SCREW	EJECT KNOB	1		
23	VKZ4323-002	SCREW	EJECT LEVER	2		
24	VKW3002-274	TENSION SPRING	EJECT LEVER	1		
25	VYH7347-001	EJECT ARM		1		
26	VKZ4341-001	SPECIAL SCREW	EJECT ARM	1		
27	VKW4938-001	TORTION SPRING	EJECT ARM	1		
28	VJT2263-003	CASS DOOR		1		
29	VKY4180-001	CASSETTE SPRING		2		
30	VYH5601-001	GEAR		1		
31	VKW5110-001	DOOR SPRING		1		
32	VJT2330-001	DOOR COVER		1		
33	E406971-221	JVC MARK		1		
34	VJT4209-001	DOOR LENS		1		
35	VKL7293-001	EJECT SAFETY(R)		1		
36	SBSF3010Z	SCREW	EJECT SAFETY	1		
37	VKW5069-001	TORSION SPRING	EJECT SAFETY	1		
38	SBSF3008Z	SCREW	F.PANEL+MECHA.	2		
39	SBST3006Z	SCREW	HOLDER+MECHA.	2		
40	VJC3237-003	BOTTOM COVER		1		
41	VJF4003-003	FOOT		2		
42	SDST3004Z	SCREW	SHIELD+T.BKT	2		
43	VMA4603-001	SHIELD PLATE		1		
44	SBST3008Z	SCREW	J.HOLDER+FUSE P	1		
45	VMA4604-002	BARRIER	FOR FUSE PCB	1		
46	QHX5080-001	WIRE CLAMP		3		
47	VYH3658-002	TRANS BRACKET		1		
48	QHS3876-162BS	CORD STOPPER	POWER CORD	1	B	
49	QHS3876-162	CORD STOPPER	POWER CORD	1	E,G,GI,EN	
50	VYH7698-002	JACK HOLDER		1		
51	SBST3008Z	SCREW	J.HOLDER+TRANS B	2		
52	VMH4046-002	HEAT SINK		1		
53	SSST3008Z	SCREW	HEAT SINK+T.BKT	2		
54	SDST3012Z	SCREW		2		
55	SBST4006Z	SCREW	POWER TRANS	4		
56	VYH7696-001	JACK STOPPER		1		
57	SBSF3008Z	SCREW	JACK STOPPER	1		
58	VYH7708-002	IC HOLDER		1		
59	SDST2608Z	SCREW	IC+IC BKT	2		
60	VMZ0087-001Z	FUSE CLIP		6		
61	VND4003-034	FUSE LABEL	FOR F951	1		
62	VND4003-050	FUSE LABEL	FOR F952	1		
63	VND4003-050	FUSE LABEL	FOR F953	1		
64	SBST3006Z	SCREW	TRANS BKT	4		
65	SBST3006Z	SCREW	HOLDER+F.PANEL	2		
66	VJG1238-001	FRONT PANEL(D)		1		
F 951	QMF51E2-R40J1	FUSE	F951	1		

BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
F 952	QMF51E2-6R3J1	FUSE	F952	1		
F 953	QMF51E2-6R3J1	FUSE	F954	1		
T 951	VTP66T2-12DBS	POWER TRANS		1	B	
	VTP66J2-12D	POWER TRANS		1	E,G,GI,EN	

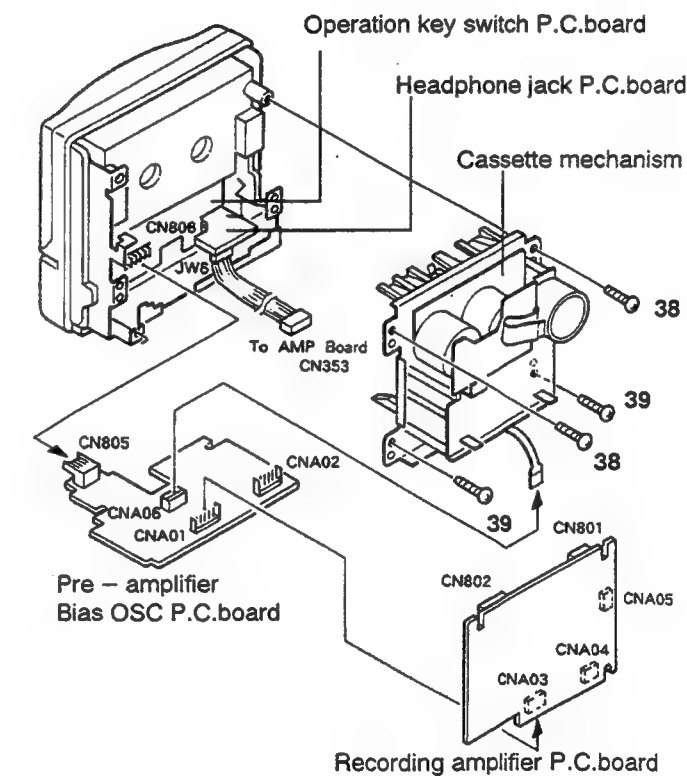


Fig. 7-3

■ Disassembly of Front Panel Ass'y

● Cassette Mechanism (Fig. 7-2, 3)

1. After raising (flooding) the recording amplifier P.C. board upward, dismount the connectors CNA03 and CNA04 on the P.C. board respectively from the connectors CNA01 and CNA02 on the pre-amplifier bias OSC P.C. board.
2. Remove the four screws (38 × 2 and 39 × 2) retaining the cassette mechanism from the front panel ass'y.
3. Pull out the flexible head wire from the connector CNA06 on the pre-amplifier bias OSC P.C. board.
4. After drawing the pre-amplifier bias OSC P.C. board toward the front side, dismount the connector CN805 on the P.C. board from the connector CN806 on the operation switch P.C. board.

● Headphone Jack P.C. Board (Fig. 7-2, 3)

The headphone jack P.C. board can be dismounted by drawing it out toward the front side from inside the front panel ass'y.

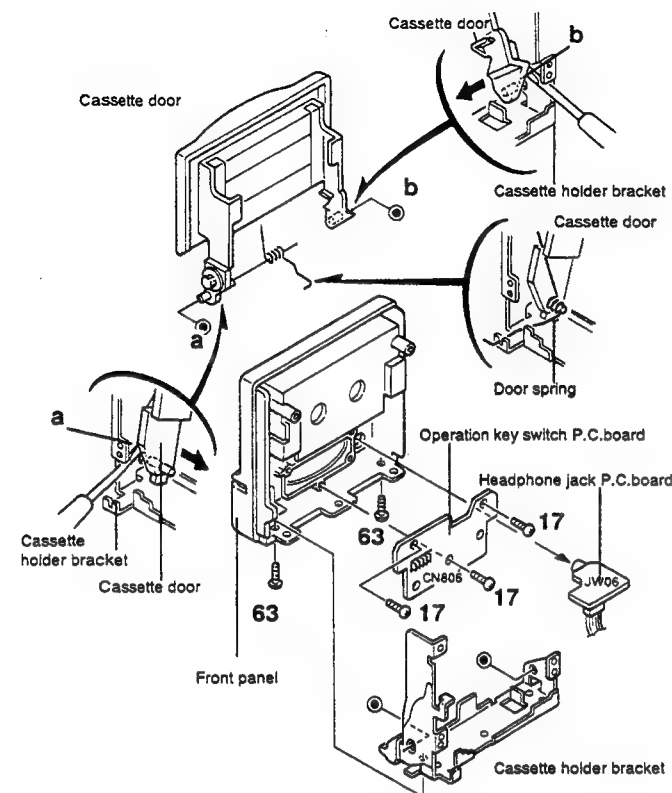


Fig. 7-4

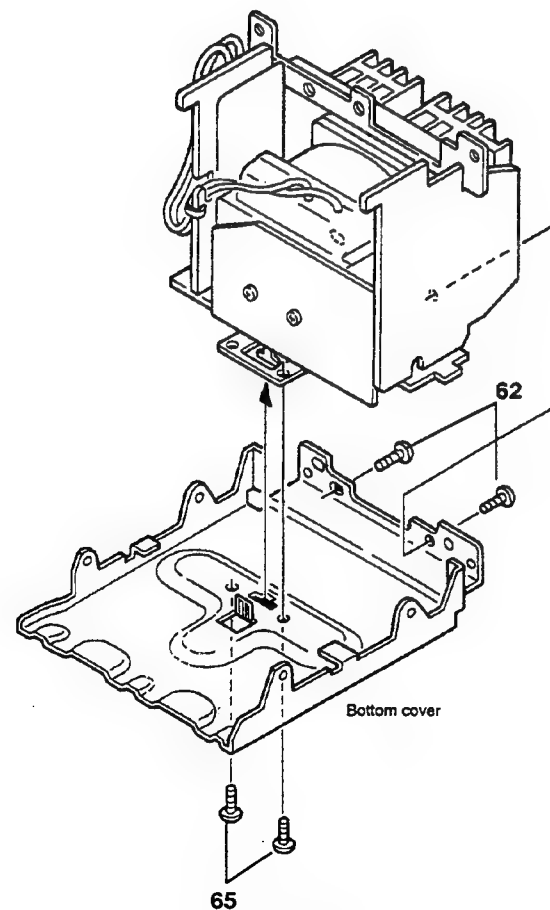


Fig. 7-5

• Operation Key Switch P.C. Board and Front Panel (Fig. 7-2, 4)

1. Remove the two screws (63) retaining the cassette holder bracket from the lower side of the front panel.
2. Insert minus screw drivers into the two right and left engagement points (a, b) of the cassette door and cassette holder bracket from inside the front panel, and disengage the above door and bracket.
3. Remove the door spring and dismount the cassette door from the front panel.
4. Draw out the cassette holder bracket from the front cover.
5. Draw out the headphone jack P.C. board from the front panel.
6. Remove the three screws (17) retaining the operation key switch P.C. board, and draw out the P.C. board.

■ Power Amplifier Power Supply Ass'y

• Power Supply Transformer (Fig. 7-2, 5~7)

1. Remove the four screws (65 × 2 and 62 × 2) retaining the bottom cover and power supply unit.
2. Remove the four screws (52 × 2 and 53 × 2) retaining the heat sink from the transformer bracket and dismount the power amplifier P.C. board.
3. Remove the one screw (44) retaining the fuse P.C. board from the transformer bracket.
4. Remove the bushing retaining the power supply cord from the transformer bracket.
5. From the connector CN955 on the fuse P.C. board, remove the # 2PIN connector outgoing from the power supply transformer.
6. Dismount the connector CN952 on the fuse P.C. board and connector CN951 on the transformer P.C. board.
7. Remove the soldering connecting the power supply transformer from the soldered surface of the transformer P.C. board and dismount the P.C. board.
8. Remove the four screws (54) retaining the power supply transformer from the transformer bracket.

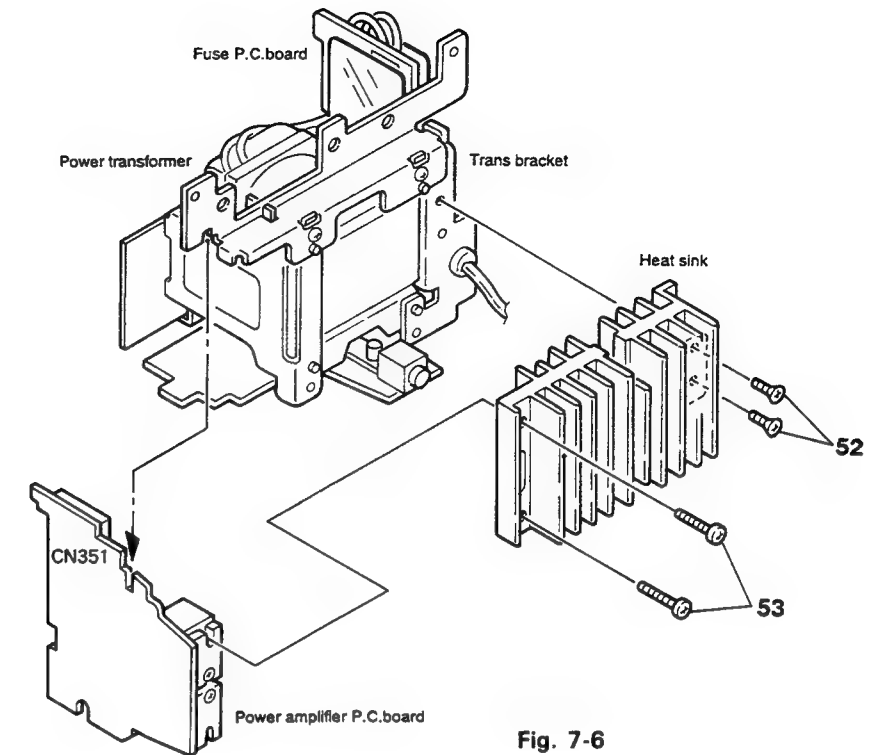


Fig. 7-6

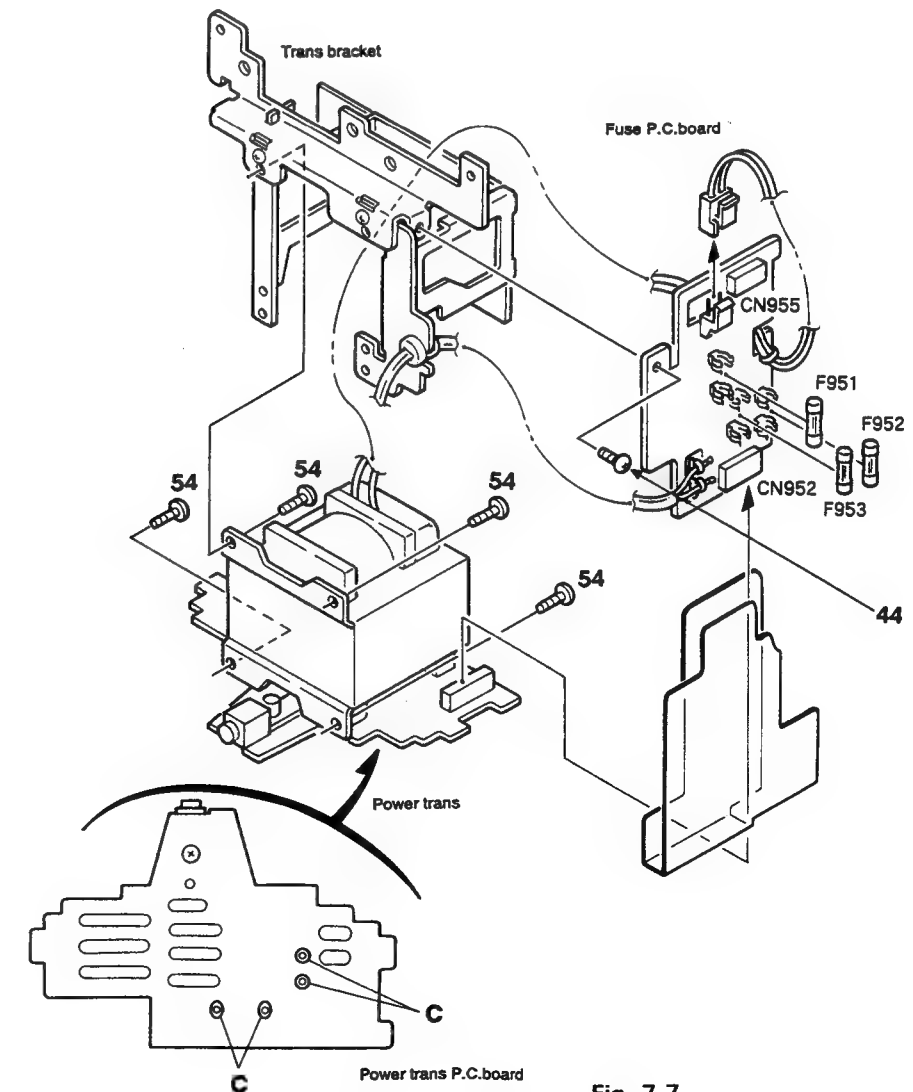


Fig. 7-7

■ Analytic Drawing (3): Block No. **M 3**

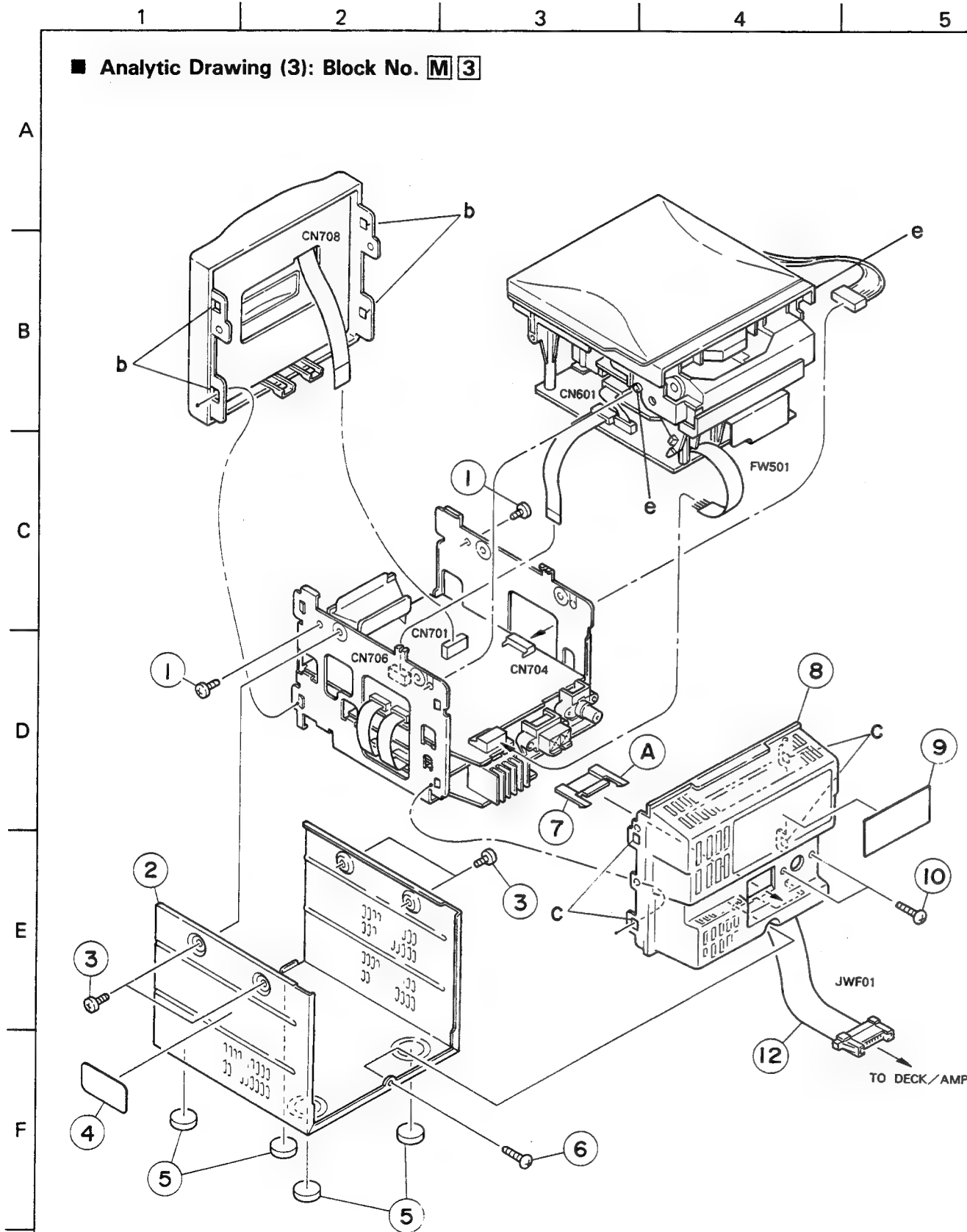


Fig. 7-8

■ Disassembly of CD Player Ass'y and Front Panel Ass'y

• Metal Cover (Fig. 7-8)

1. Remove the four screws (3) retaining the metal cover from the body.
2. Remove the one screw (6) retaining the metal cover from the back surface of the body.
3. Dismount the metal cover while expanding it outward.

• Front Panel Ass'y (Fig. 7-8)

From the connector CN701 on the LCD microcomputer P.C. board, remove the card wire outgoing from the connector CN708 on the operation key switch P.C. board attached to the front panel ass'y, and separate the card wire from the front panel ass'y.

• CD Player Ass'y (Fig. 7-8 ~ 11)

1. After turning the body upside down, insert a minus screw driver into the hole (d) engaging the system wire inserting wire holder and the rear cover, and disengage the holder and cover. Then, dismount the wire holder while pulling it out.
2. Remove the two screws (10) retaining the rear panel from the body.
3. After inserting a minus screw driver between the four engagement points (c) fixing the rear cover, release the engagements and separate the rear cover from the body.
4. After inserting a minus screw driver between the front panel and chassis, release the four engagement points (b) fixing the front panel ass'y, and separate the front panel ass'y from the body.
5. Remove the two screws (1) retaining both sides of the CD player ass'y from the chassis.
6. After expanding the right and left sides of the chassis outward, release the right and left engagements (e) of the CD player ass'y and chassis, and separate the CD player ass'y from the body.

7. From the connector CN704 on the LCD microcomputer P.C. board, dismount the door switch P.C. board attached to the CD player ass'y and the #6PIN connector outgoing from the door motor P.C. board.
8. From the connector CN706 on the LCD microcomputer P.C. board, dismount the card wire outgoing from the connector CN601 on the CD amplifier P.C. board attached to the CD player ass'y.
9. From the connector CN705 on the LCD microcomputer P.C. board, dismount the #PIN parallel wire outgoing from FW501 on the CD amplifier P.C. board.

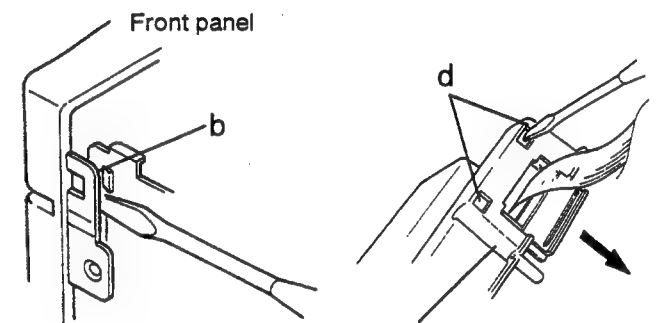


Fig. 7-9

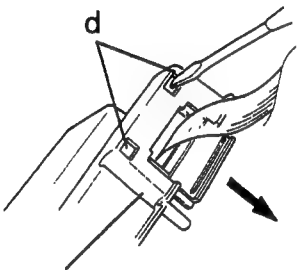


Fig. 7-10

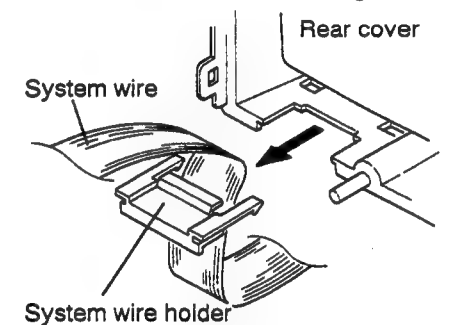
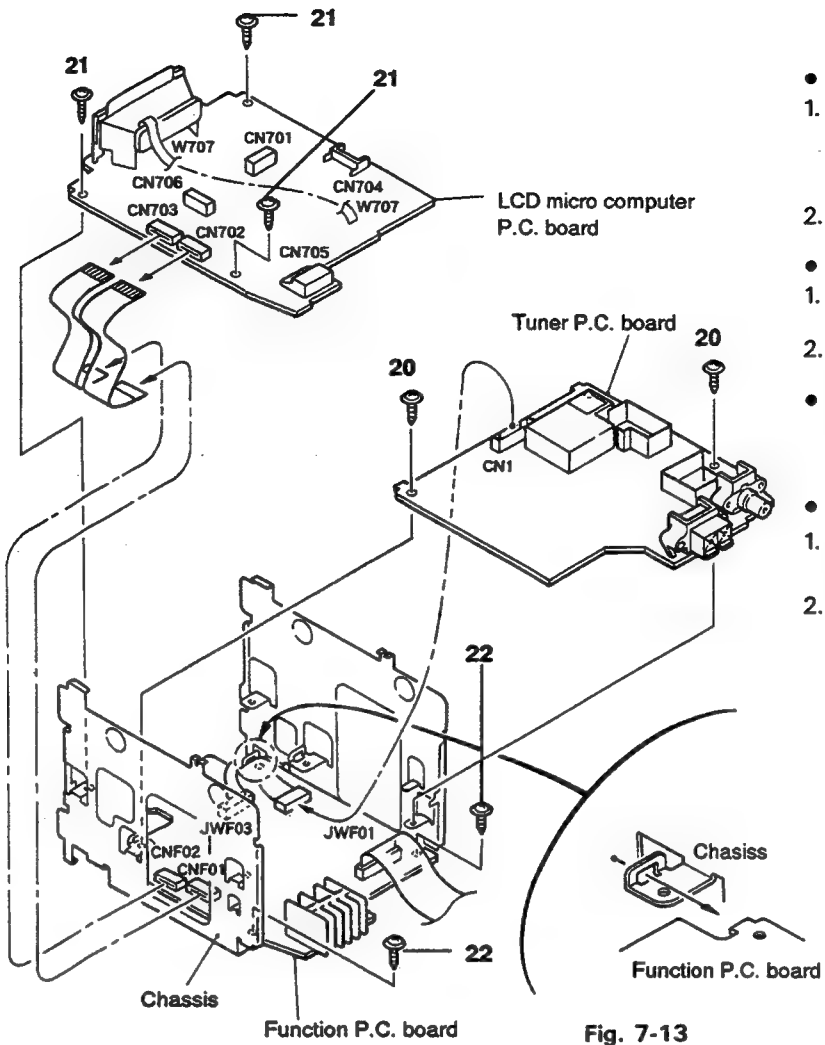
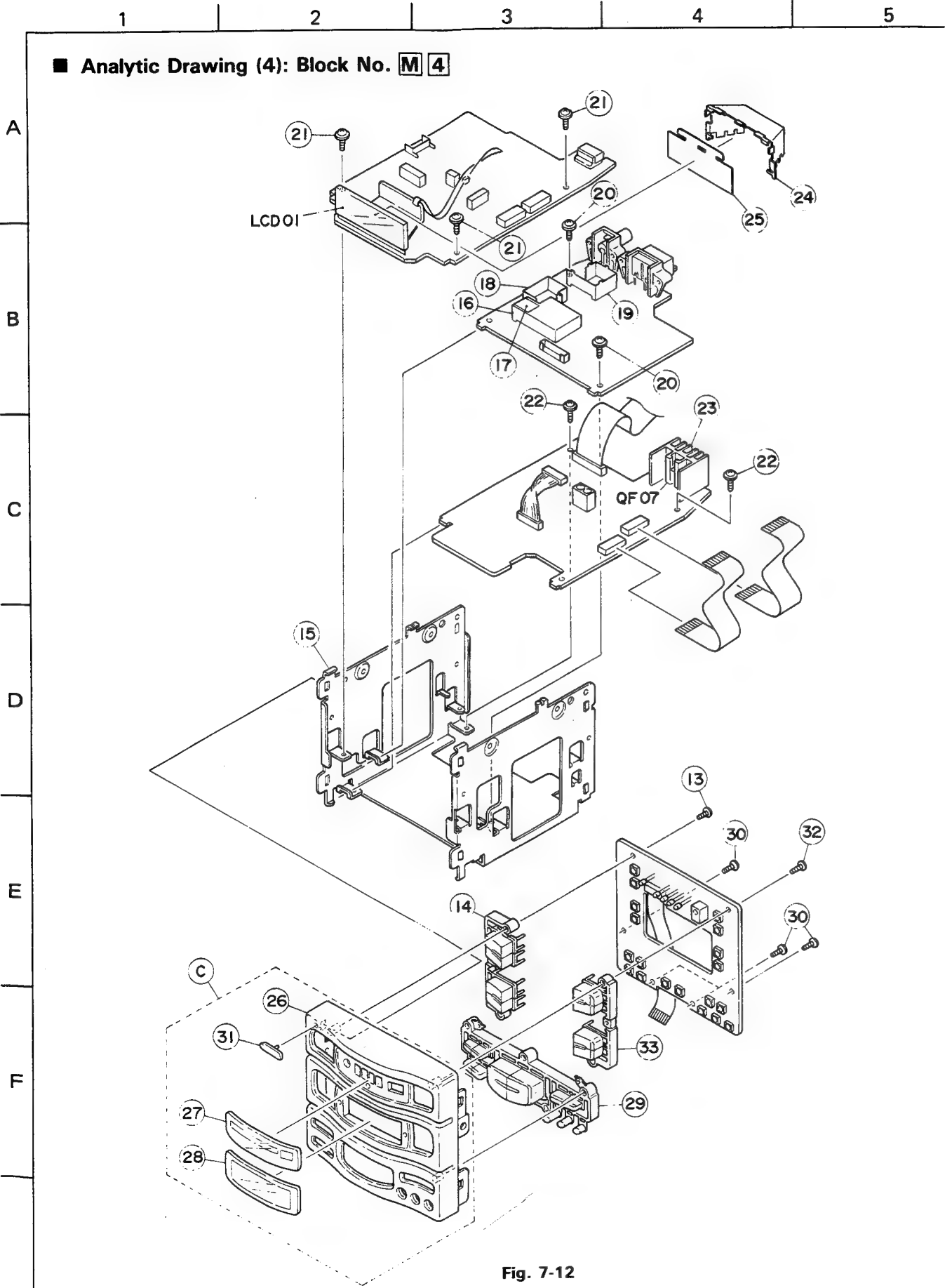


Fig. 7-11

■ Analytic Drawing (3) Parts List **M 3**

BLOCK NO. **M3MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	SDSF3008Z	SCREW	CD+CHASSIS UNIT	2		
2	VJC2411-004	METAL COVER		1		
3	SDST3006M	SCREW		4		
4	VND4221-001	CLASS 1 LABEL	METAL COVER	1		
5	VJF4003-003	FOOT		4		
6	SBSF3008N	T.SCREW		1		
7	VYH7707-001	WIRE HOLDER	SYSTEM WIRE 94H	1		
8	VJG1137-001	REAR PANEL(T)		1		
9	VYN9214-001	NAME PLATE		1		
10	SBSF3008N	T.SCREW		1		
11	SBSF3008N	T.SCREW	FOR SYSTEM WIRE	1		
12	EMV7130-017	WIRE HOLDER		1		
	VMP0092-001	SYSTEM WIRE ASY	JWF01	1		



- **LCD Microcomputer P.C. Board** (Fig. 7-12, 13)
 1. From the connectors CN702 and CN703 on the LCD microcomputer P.C. board, dismount the card wire outgoing from the connectors CNF01 and CNF on the function P.C. board.
 2. Remove the three screws (21) retaining the LCD microcomputer P.C. board from the chassis.
- **Tuner P.C. Board** (Fig. 7-12, 13)
 1. Remove the three screws (20) retaining the tuner P.C. board from the chassis.
 2. From #10PIN connector CN1, dismount the outgoing from the connector JWF03 on the function P.C. board.
- **Function P.C. Board** (Fig. 7-12, 13)
 - Remove the two screws (22) retaining the function P.C. board from the chassis.
- **Operation Key Switch P.C. board** (Fig. 7-12)
 1. Dismount the front panel ass'y according to the procedures described previously.
 2. Remove the six screws (13 × 1, 30 × 4 and 32 × 1) retaining the operation key switch P.C. board from the front panel.

■ Analytic Drawing (4) Parts List

BLOCK NO. M4MM							
REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR	
C	ZCUXRA4K-FB	FRONT CABINET	REF.26-28,31	1			
13	SBSF2610Z	SCREW	BUTTON(A)	1			
14	VXP3618-002	BUTTON(A)		1			
15	VYH2269-002	CHASSIS		1			
16	VMA4561-001	SHIELD CASE		1			
17	PU59915-105	SPACER		1			
18	VMA4522-001	SHIELD(B)		1			
19	VMA4521-001	SHIELD(A)		1			
20	GBST3006Z	SCREW	TU PWB+CHASSIS	2			
21	GBST3006Z	SCREW	CPU PWB+CHASSIS	3			
22	GBST3006Z	SCREW	FUNC PWB+CHASSI	2			
23	VYH7734-001	HEAT SINK	QF07	1			
24	VYH3784-001	LAMP CASE	SPT	1			
25	VYTT635-001	LCD FILTER	カクツ イロヲシヨウ	1			
26	VJG1237-001	FRONT PANEL(T)		1			
27	VJK4403-002	REMOTE LENS	AS SILKX4	1			
28	VJK4404-002	LCD LENS	AS SILKX2	1			
29	VXP3601-001	VOLUME BUTTON	ABS	1			
30	SBSF2610Z	SCREW	VOLUME BUTTON	4			
31	E406971-221	JVC MARK	22.5W	1			
32	SBSF2610Z	SCREW	FOR BOTTON(B)	1			
33	VXP3619-002	BUTTON(B)	ABS	1			
LCD01	VGL1146-001	LCD		1			

■ Analytic Drawing (3): Block No. **M 3**

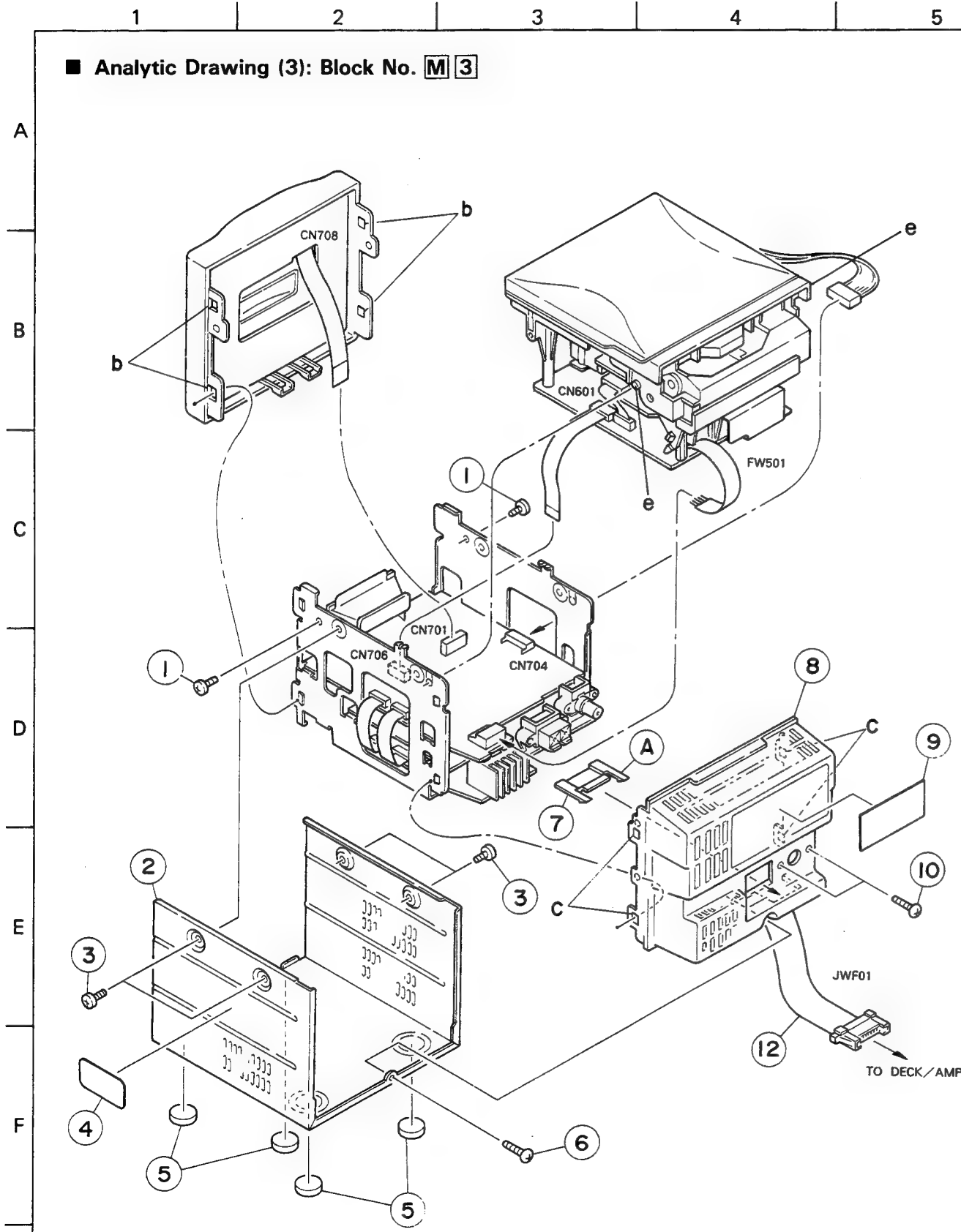


Fig. 7-8

■ Disassembly of CD Player Ass'y and Front Panel Ass'y

• Metal Cover (Fig. 7-8)

1. Remove the four screws (3) retaining the metal cover from the body.
2. Remove the one screw (6) retaining the metal cover from the back surface of the body.
3. Dismount the metal cover while expanding it outward.

• Front Panel Ass'y (Fig. 7-8)

From the connector CN701 on the LCD microcomputer P.C. board, remove the card wire outgoing from the connector CN708 on the operation key switch P.C. board attached to the front panel ass'y, and separate the card wire from the front panel ass'y.

• CD Player Ass'y (Fig. 7-8 ~ 11)

1. After turning the body upside down, insert a minus screw driver into the hole (d) engaging the system wire inserting wire holder and the rear cover, and disengage the holder and cover. Then, dismount the wire holder while pulling it out.
2. Remove the two screws (10) retaining the rear panel from the body.
3. After inserting a minus screw driver between the four engagement points (c) fixing the rear cover, release the engagements and separate the rear cover from the body.
4. After inserting a minus screw driver between the front panel and chassis, release the four engagement points (b) fixing the front panel ass'y, and separate the front panel ass'y from the body.
5. Remove the two screws (1) retaining both sides of the CD player ass'y from the chassis.
6. After expanding the right and left sides of the chassis outward, release the right and left engagements (e) of the CD player ass'y and chassis, and separate the CD player ass'y from the body.

7. From the connector CN704 on the LCD microcomputer P.C. board, dismount the door switch P.C. board attached to the CD player ass'y and the #6PIN connector outgoing from the door motor P.C. board.
8. From the connector CN706 on the LCD microcomputer P.C. board, dismount the card wire outgoing from the connector CN601 on the CD amplifier P.C. board attached to the CD player ass'y.
9. From the connector CN705 on the LCD microcomputer P.C. board, dismount the #PIN parallel wire outgoing from FW501 on the CD amplifier P.C. board.

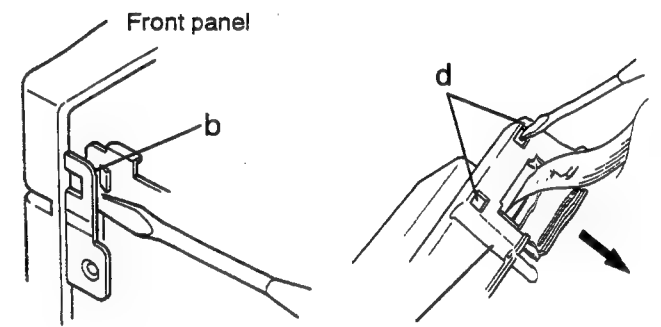


Fig. 7-9

Fig. 7-10

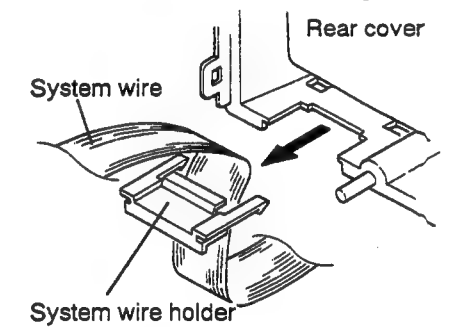
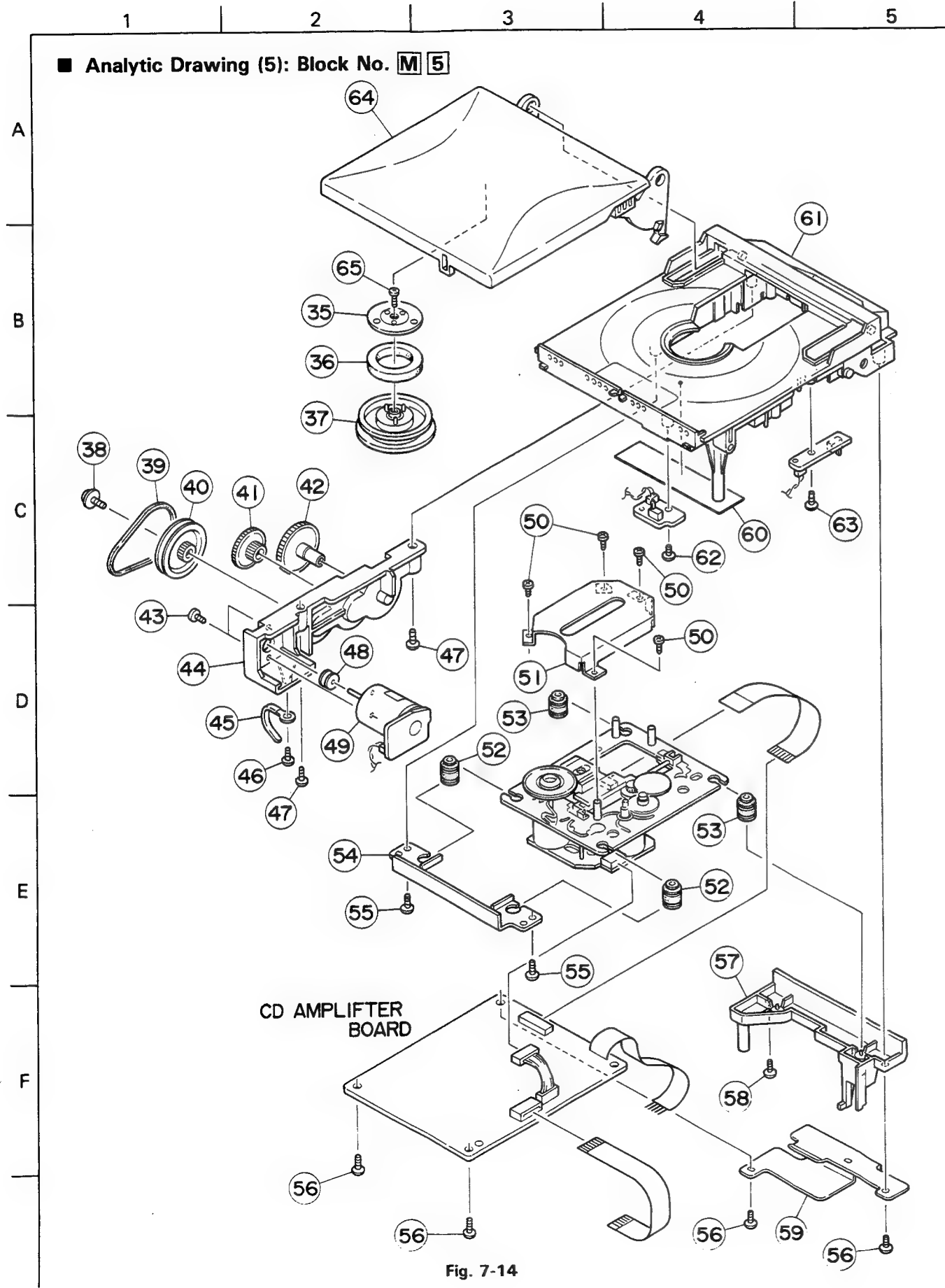


Fig. 7-11

■ Analytic Drawing (3) Parts List **M 3**

BLOCK NO. **M3MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	SDSF3008Z	SCREW	CD+CHASSIS UNIT	2		
2	VJC2411-004	METAL COVER		1		
3	SDST3006M	SCREW		4		
4	VND4221-001	CLASS 1 LABEL	METAL COVER	1		
5	VJF4003-003	FOOT		4		
6	SBSF3008N	T.SCREW		1		
7	VYH7707-001	WIRE HOLDER	SYSTEM WIRE 94H	1		
8	VJG1137-001	REAR PANEL(T)		1		
9	VYN9214-001	NAME PLATE		1		
10	SBSF3008N	T.SCREW		1		
11	EMV7130-017	WIRE HOLDER	FOR SYSTEM WIRE	1		
12	VMP0092-001	SYSTEM WIRE ASY	JWF01	1		



■ Analytic Drawing (5) Parts List

BLOCK NO. M5MM						
REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
35	VYH7677-201	YOKE		1		
36	VYH7313-001R	MAGNET		1		
37	VYH3726-001	CLAMPER		1		
38	GBSF3006Z	SCREW	PULLEY+GEAR BKT	1		
39	VKB3000-144Y	BELT		1		
40	VYH7356-002	PULLEY		1		
41	VYH7357-001	GEAR(A)		1		
42	VYH7358-001	GEAR(B)		1		
43	SPSP3004Z	SCREW	MOTOR+GEAR BKT	2		
44	VYH3785-001	GEAR BKT		1		
45	VKZ4001-110	WIRE CLAMP		1		
46	SBSF3010Z	SCREW	FOR WIRE CLAMP	1		
47	SBSF3010Z	SCREW	CD CASE+GEAR BK	2		
48	VYH7699-001	PULLEY	MOTOR	1		
49	MXN-13FB12F	DC MOTOR ASS'Y	CASSETTE DOOR	1		
50	SDST2006M	SCREW	CD MECHA+P.COVE	4		
51	VJD5410-005	PICK COVER		1		
52	E75609-002	INSULATOR		2		
53	E75609-001	INSULATOR		2		
54	VYH7815-001	CD MECHA HOLDER		1		
55	SBSF3010Z	SCREW	CASE+HOLDER	2		
56	SBSF3010Z	SCREW	CD AMP PWB+CD	4		
57	VYH3790-001	CD MECHA HOLDER		1		
58	SBSF3010Z	SCREW	CASE+HOLDER	1		
59	VMA3215-001	SHIELD(CD)	FOR CD MECA WIR	1		
60	VND4220-001	LASER CAUTION		1		
61	VJD1177-001	CD CASE		1		
62	SBSF3006Z	SCREW	SW PWB+CD CASE	1		
63	SBSF3010Z	SCREW	SW-PWB*CD CASE	1		
64	VJT2328-001	CD DOOR		1		
65	SBSF2606Z	SCREW	FOR CLAMPER	1		

- **CD Amplifier P.C. Board** (Fig. 7-14, 15)

1. Remove the three screws (56) retaining the CD amplifier P.C. board from the CD player ass'y.
2. From the optical pickup unit P.C. board, pull out the card wire outgoing from the connector CN501 on the CD amplifier P.C. board.
3. From the connector P011 on the spindle feed motor P.C. board, dismount the #6PIN connector outgoing from the connector CN502 on the CD amplifier P.C. board.

- **CD Mechanism Ass'y** (Fig. 7-14, 16)

By removing the three screws (55) × 2 and (58) × 1 simultaneously retaining the CD mechanism, rear and front brackets, separate the CD mechanism ass'y (from the brackets).

- **CD Door Motor Ass'y** (Fig. 7-14, 16 ~ 18)

Insert a minus screw driver into the positions (h) and (i) when the right and left CD door assemblies and CD cases are engaged, and dismount the CD door assemblies.

- **CD Door Motor Ass'y** (Fig. 7-14, 16)

Remove the two screws (47) retaining the CD door assemblies from the CD cases.

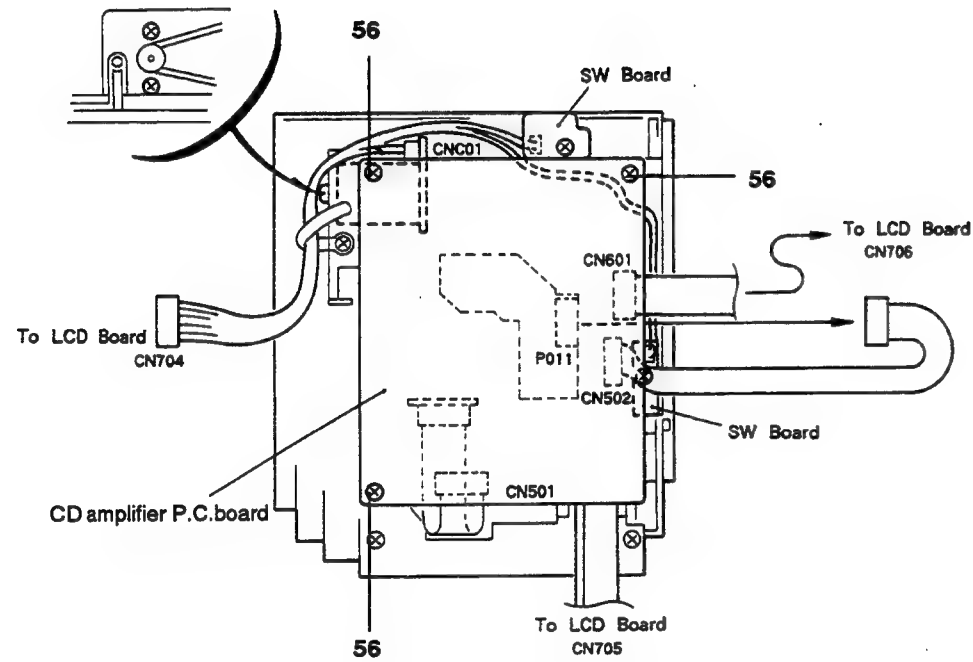


Fig. 7-15

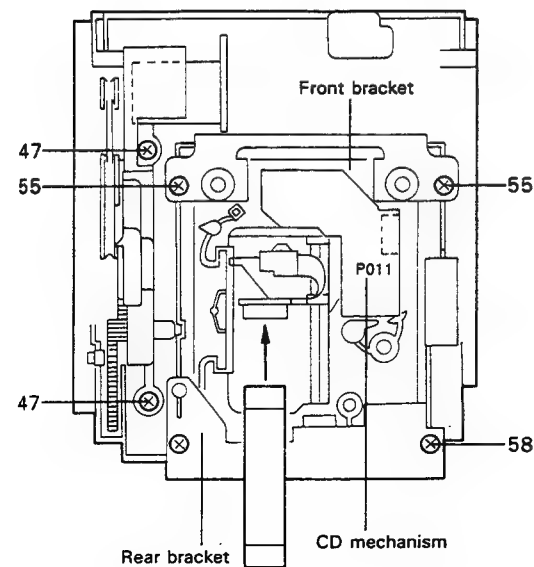


Fig. 7-16

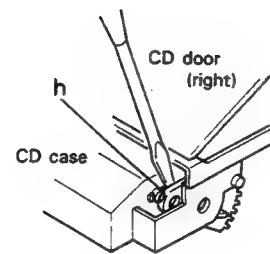


Fig. 7-17

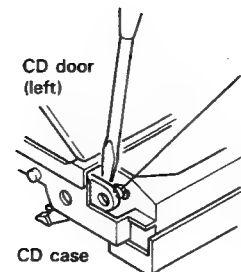


Fig. 7-18

CD/Tuner Section

Color codes are shown below.

- 1 Brown
- 2 Red
- 3 Orange
- 4 Yellow
- 5 Green
- 6 Blue
- 7 Violet
- 8 Gray
- 9 White
- 0 Black
- D Pink
- C Light Blue

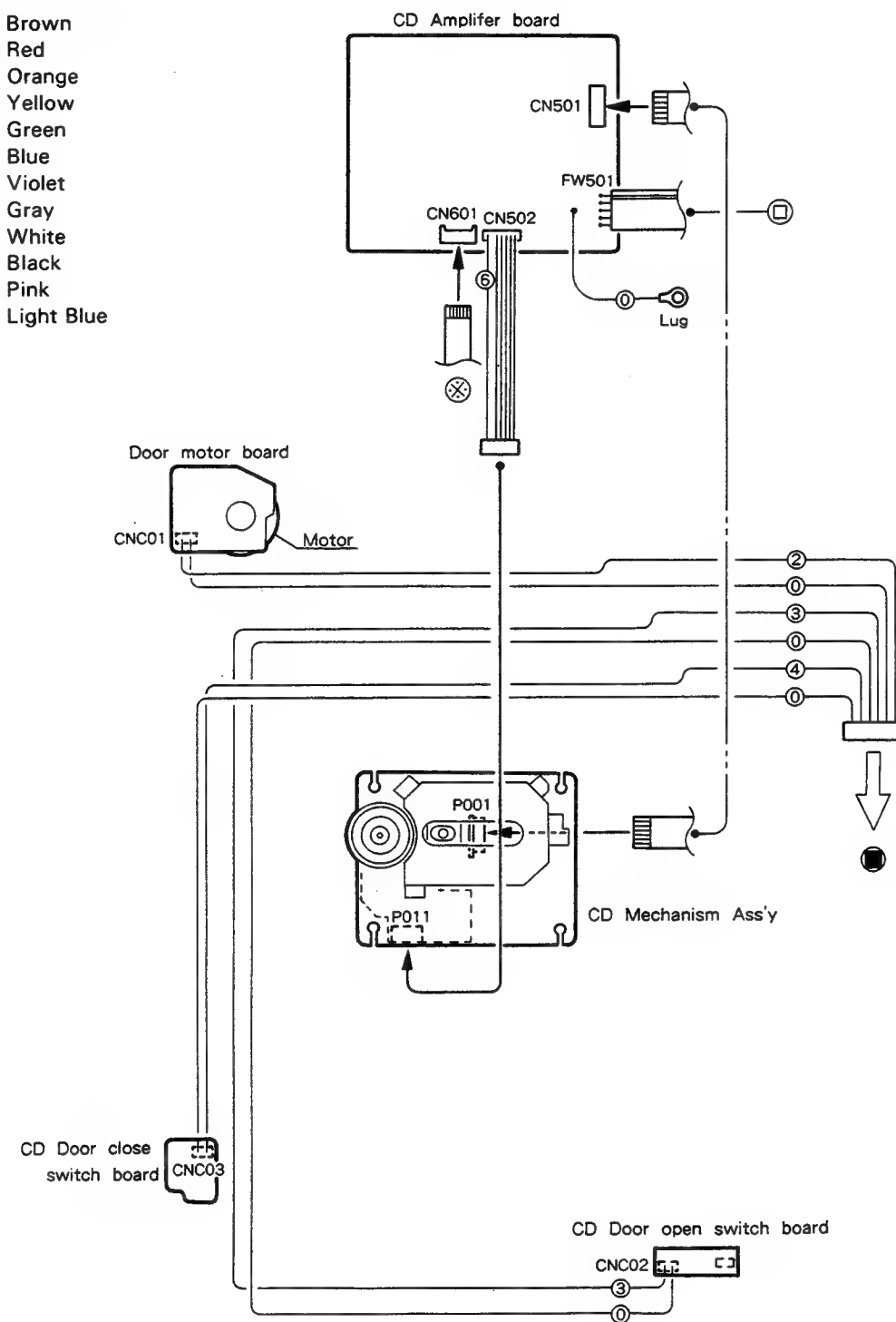


Fig. 10-2

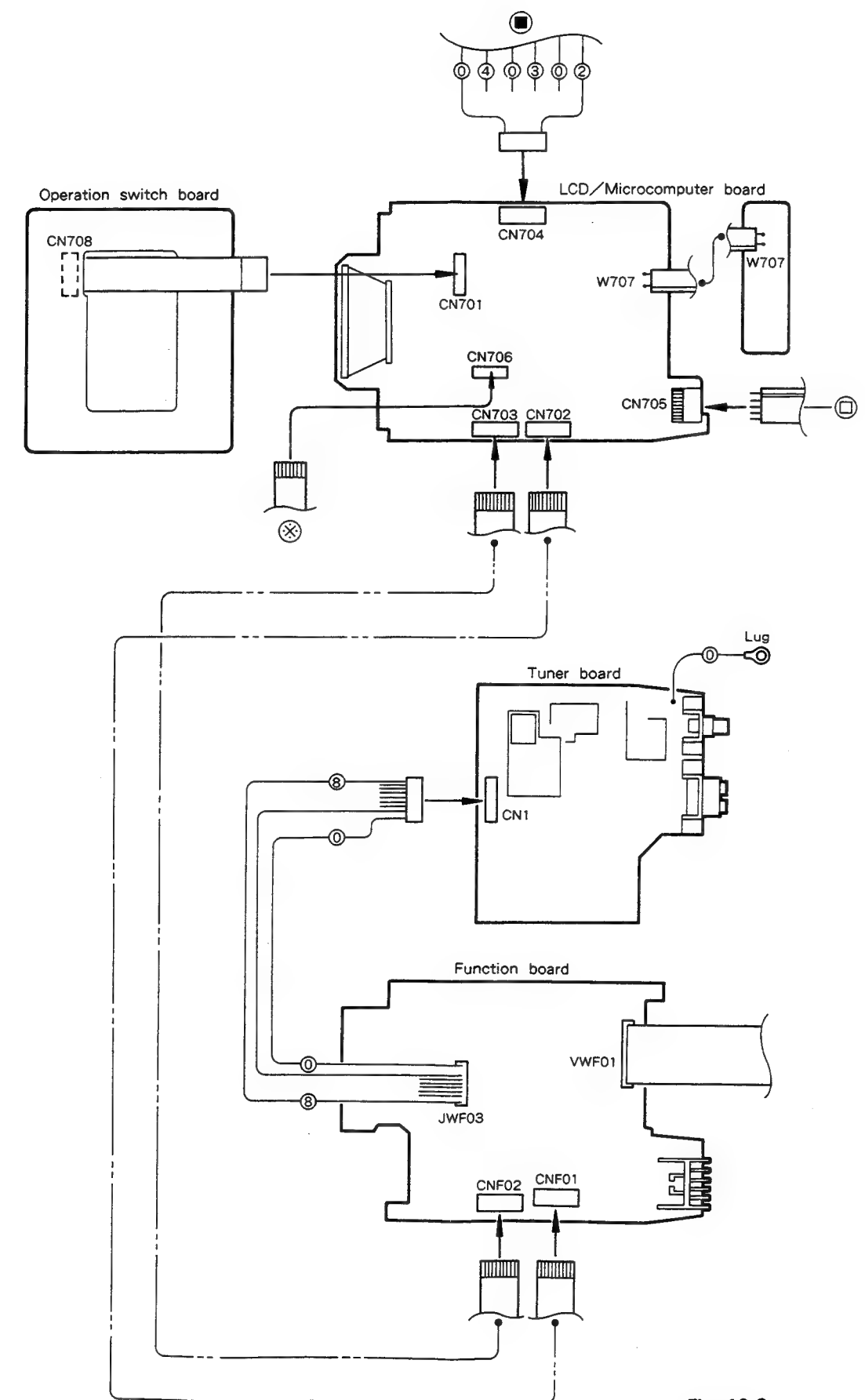
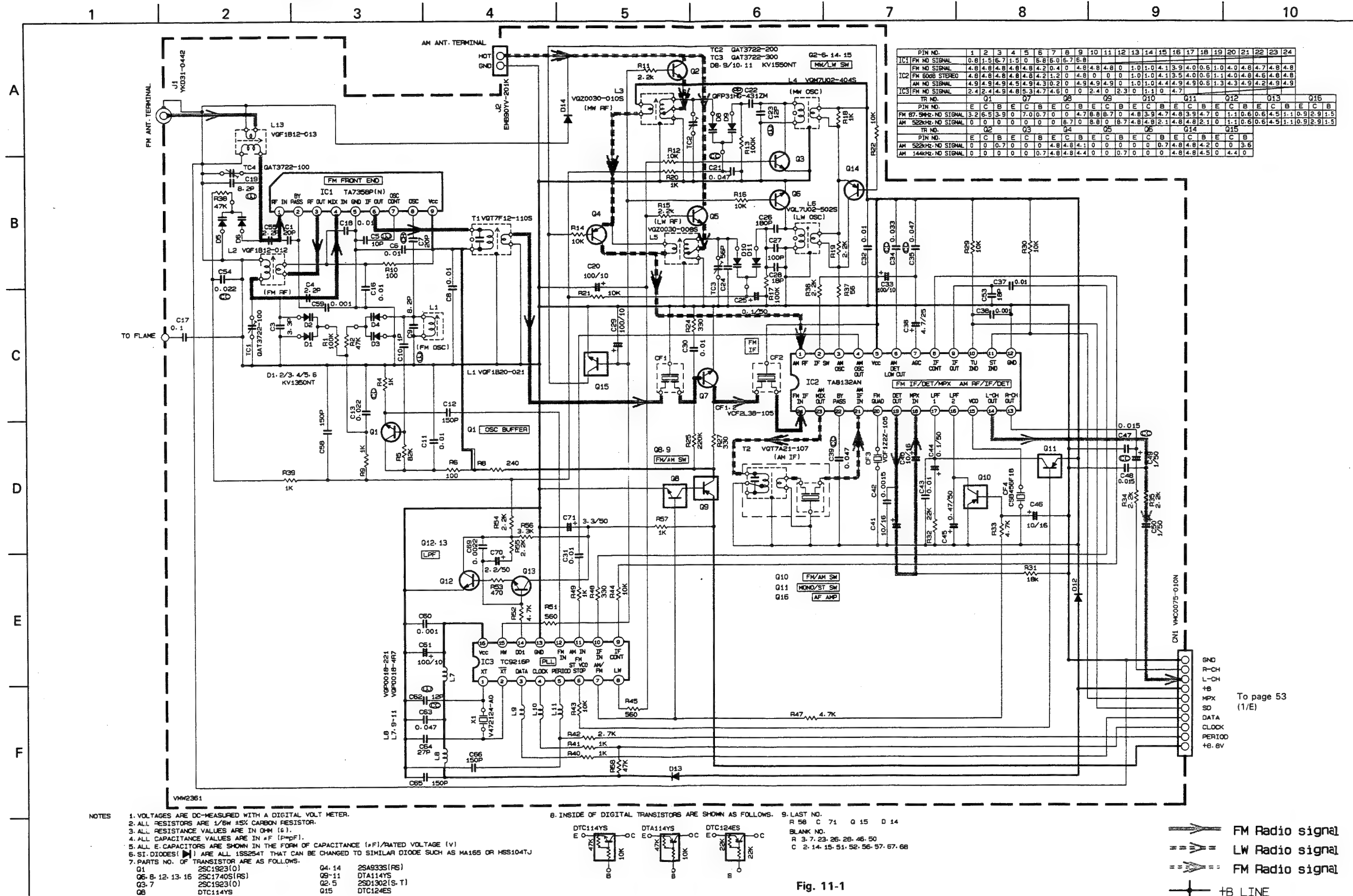


Fig. 10-3

11. Standard Schematic Diagram ■ Tuner Circuit: Drawing No. VDH9214-005TW (UX-A4 B/E/EN)



■ Tuner Circuit: Drawing No. VDH9214-008TW (UX-A4 G/GI)

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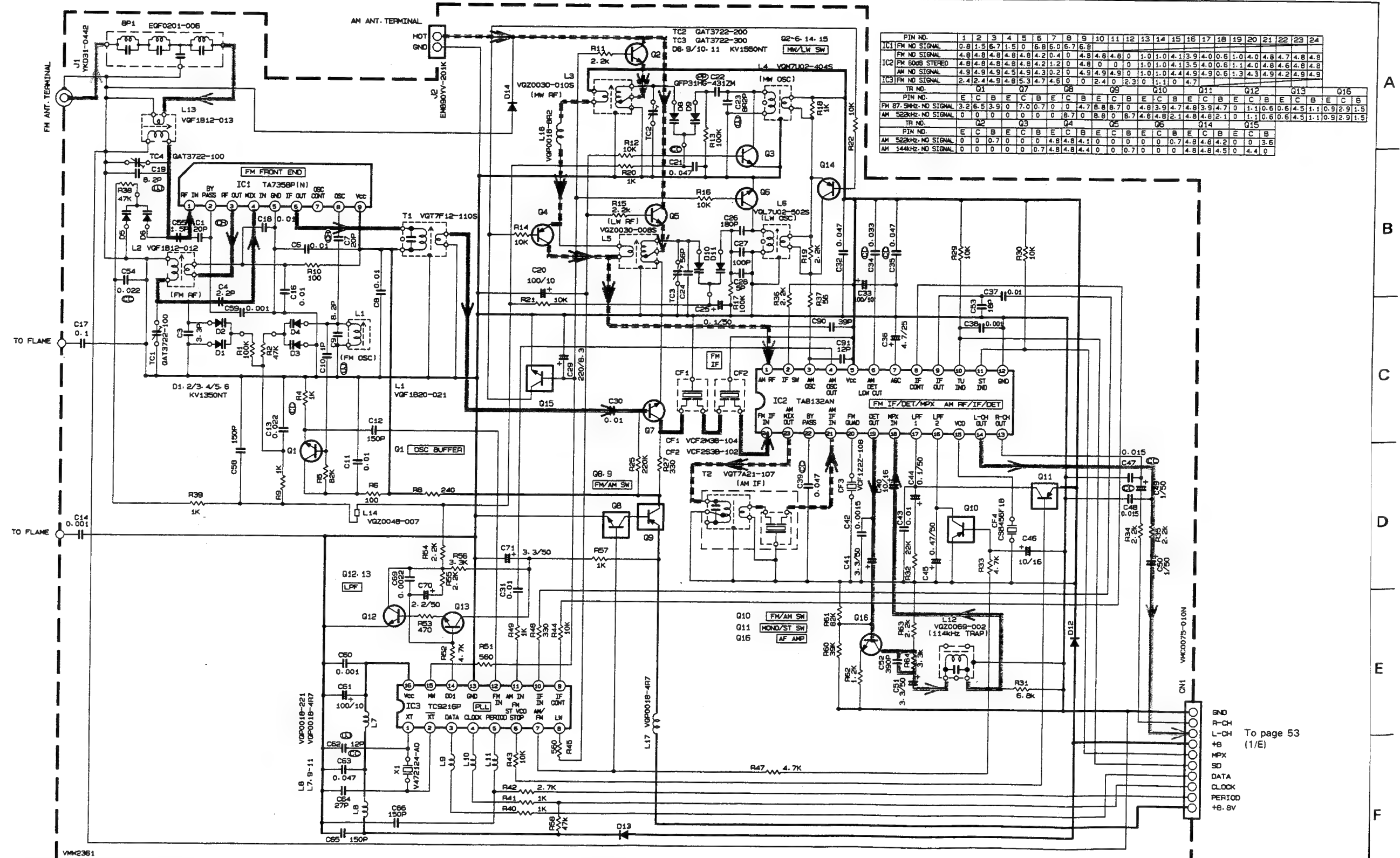
16

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NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.

2. ALL RESISTORS ARE 1/8W 15% CARBON RESISTOR.

3. ALL RESISTANCE VALUES ARE IN OHM (Ω).

4. ALL CAPACITANCE VALUES ARE IN P (pF).

5. ALL E. CAPACITORS ARE IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

6. SI DIODES (1N4148) ARE ALL 1SS254T THAT CAN BE CHANGED TO SIMILAR DIODES MA165 OR HSS104TJ.

7. PARTS NO. OF TRANSISTOR ARE AS FOLLOWS.

Q1: 3-7 2SC2668(O)

Q2: 5 2SD1302(S.T)

Q3: 8-12-13-15 2SC2785(E.F)

Q4: 14 2SA1175(HFE)

Q5: 11 DTA114YS

Q6: 1 2SD1302(S.T)

Q7: 15 DTC124ES

Q8: DTC114YS

Q9: 11 DTA114YS

Q10: 15 DTC124ES

Q11: 15 DTC124ES

Q12: 15 DTC124ES

Q13: 15 DTC124ES

Q14: 15 DTC124ES

Q15: 15 DTC124ES

Q16: 15 DTC124ES

Q17: 15 DTC124ES

Q18: 15 DTC124ES

Q19: 15 DTC124ES

Q20: 15 DTC124ES

Q21: 15 DTC124ES

Q22: 15 DTC124ES

Q23: 15 DTC124ES

Q24: 15 DTC124ES

Q25: 15 DTC124ES

Q26: 15 DTC124ES

Q27: 15 DTC124ES

Q28: 15 DTC124ES

Q29: 15 DTC124ES

Q30: 15 DTC124ES

Q31: 15 DTC124ES

Q32: 15 DTC124ES

Q33: 15 DTC124ES

Q34: 15 DTC124ES

Q35: 15 DTC124ES

Q36: 15 DTC124ES

Q37: 15 DTC124ES

Q38: 15 DTC124ES

Q39: 15 DTC124ES

Q40: 15 DTC124ES

Q41: 15 DTC124ES

Q42: 15 DTC124ES

Q43: 15 DTC124ES

Q44: 15 DTC124ES

Q45: 15 DTC124ES

Q46: 15 DTC124ES

Q47: 15 DTC124ES

Q48: 15 DTC124ES

Q49: 15 DTC124ES

Q50: 15 DTC124ES

Q51: 15 DTC124ES

Q52: 15 DTC124ES

Q53: 15 DTC124ES

Q54: 15 DTC124ES

Q55: 15 DTC124ES

Q56: 15 DTC124ES

Q57: 15 DTC124ES

Q58: 15 DTC124ES

Q59: 15 DTC124ES

Q60: 15 DTC124ES

Q61: 15 DTC124ES

Q62: 15 DTC124ES

Q63: 15 DTC124ES

Q64: 15 DTC124ES

Q65: 15 DTC124ES

Q66: 15 DTC124ES

Q67: 15 DTC124ES

Q68: 15 DTC124ES

Q69: 15 DTC124ES

Q70: 15 DTC124ES

Q71: 15 DTC124ES

Q72: 15 DTC124ES

Q73: 15 DTC124ES

Q74: 15 DTC124ES

Q75: 15 DTC124ES

Q76: 15 DTC124ES

Q77: 15 DTC124ES

Q78: 15 DTC124ES

Q79: 15 DTC124ES

Q80: 15 DTC124ES

Q81: 15 DTC124ES

Q82: 15 DTC124ES

Q83: 15 DTC124ES

Q84: 15 DTC124ES

Q85: 15 DTC124ES

Q86: 15 DTC124ES

Q87: 15 DTC124ES

Q88: 15 DTC124ES

Q89: 15 DTC124ES

Q90: 15 DTC124ES

Q91: 15 DTC124ES

Q92: 15 DTC124ES

Q93: 15 DTC124ES

Q94: 15 DTC124ES

Q95: 15 DTC124ES

Q96: 15 DTC124ES

Q97: 15 DTC124ES

Q98: 15 DTC124ES

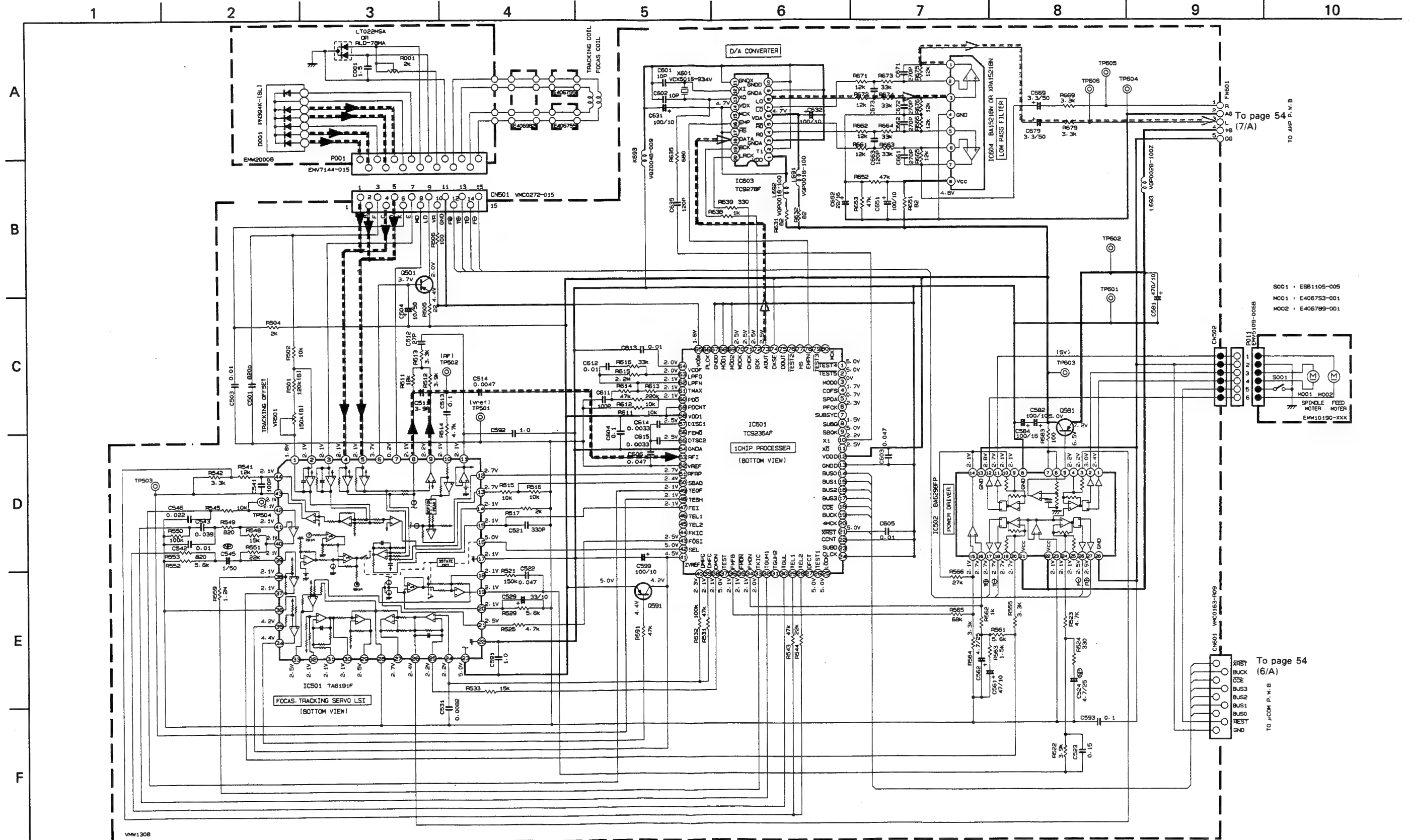
Q99: 15 DTC124ES

Q100: 15 DTC124ES

Fig. 11-2

== V == LW Radio signal
 == V == MW Radio signal
 == V == FM Radio signal
 +B LINE

■ CD Amplifier Circuit: Drawing No. VDH9214-005CV (All version)



- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER IN PLAYBACK
 2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
- ALL RESISTANCE VALUES ARE IN OHM(S).
- ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
- ALL CAPACITANCE VALUES ARE IN pF(PMPF).
- ALL INDUCTANCE VALUES ARE IN mH(MH).
- ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
- ① UNFLAMMABLE CARBON RESISTOR
- ② METAL FILM RESISTOR
- ③ OXIDE METAL FILM RESISTOR
- ④ 20% LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
- ⑤ NON-POLARISED ELECTROLYTIC CAPACITOR
- ⑥ POLYPROPYLENE CAPACITOR
- ⑦ POLYSTYROL CAPACITOR

Q501	2SA952(L,K)
Q502	
Q503	2SA1309(R,S) OR 2SA1175(HFE) OR 2SA933S(RS)

To page 54
(7/A)

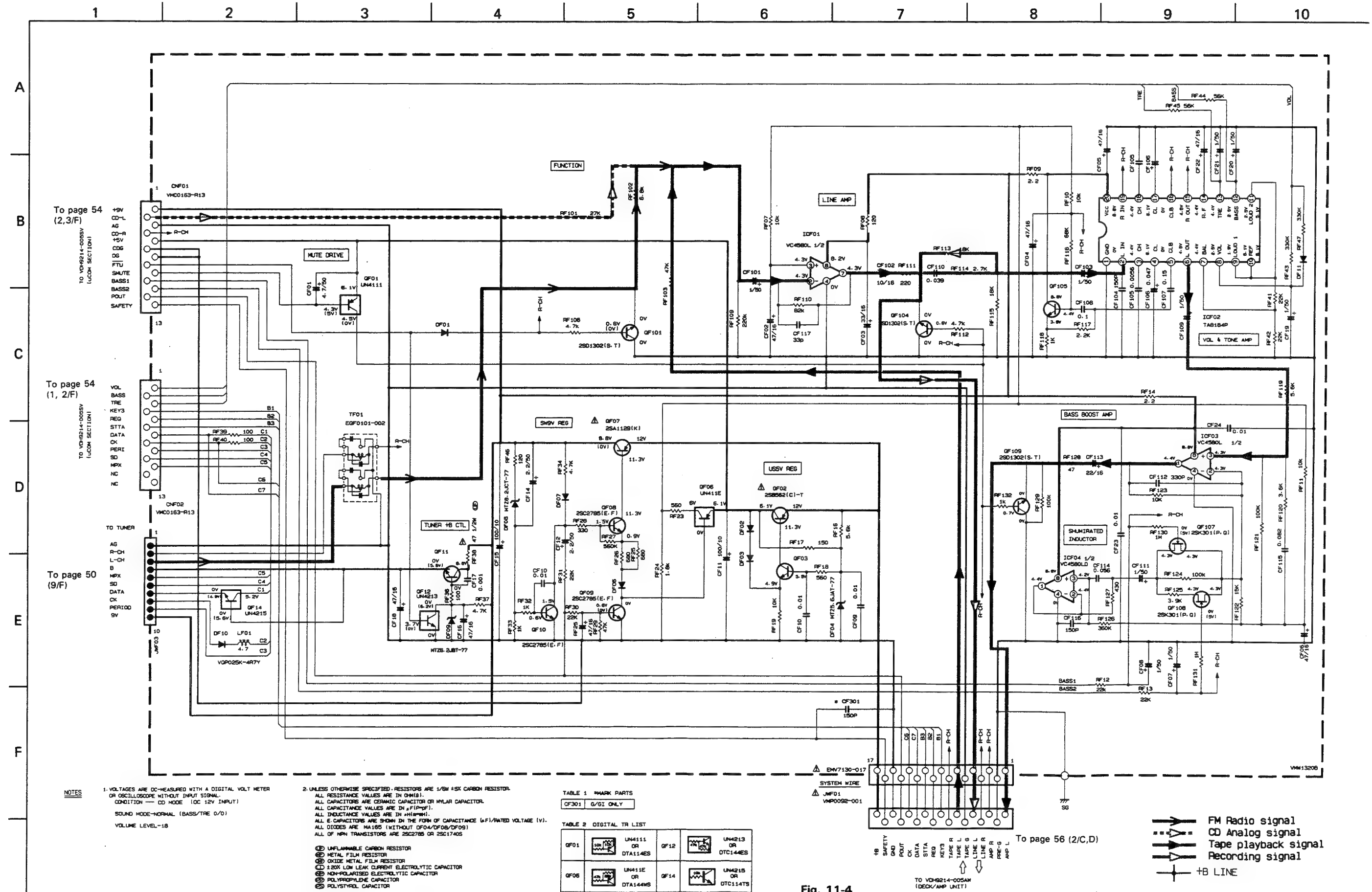
S001 : E581105-005
M001 : E406753-001
M002 : E406789-001

To page 54
(6/A)

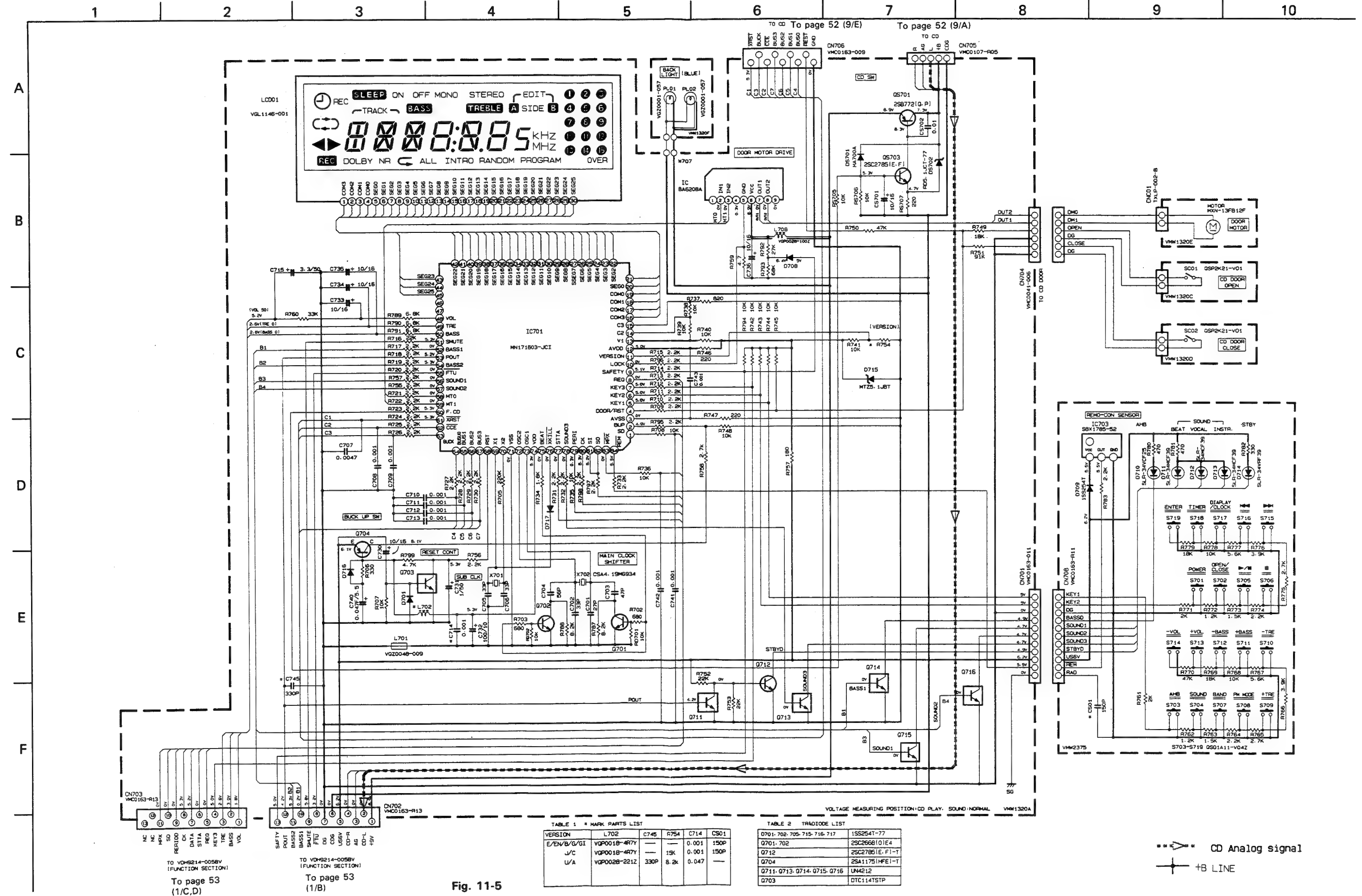
- ⬇ CD Digital signal
- ⬇ CD Analog signal
- ⬆ +B LINE

Fig. 11-3

■ Function/Line Amplifier Circuit: Drawing No. VDH9214-005BV



■ LCD/Micro Computer Circuit: Drawing No. VDH9214-005SV (All version)



11	12	13	14	15	16	17	18	19	20
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1 2 3 4 5 6 7 8 9 10

A

B

C

D

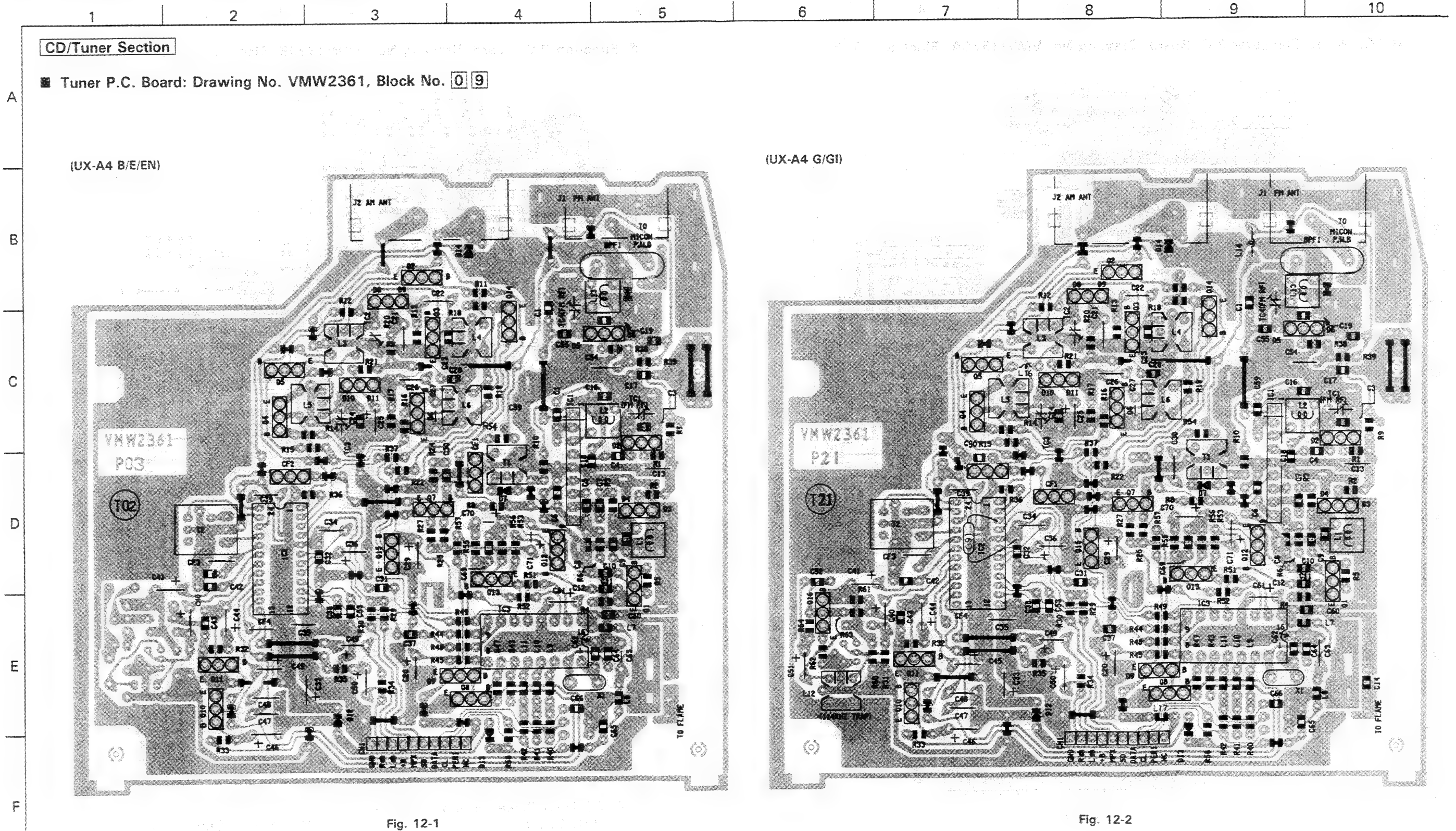
E

F

Fig. 11-7

Fig. 11-7

12. Location of P.C. Board Parts



1 2 3 4 5 6 7 8 9 10

■ LCD/Micro Computer P.C. Board: Drawing No. VMW1320A, Block No. 0 5

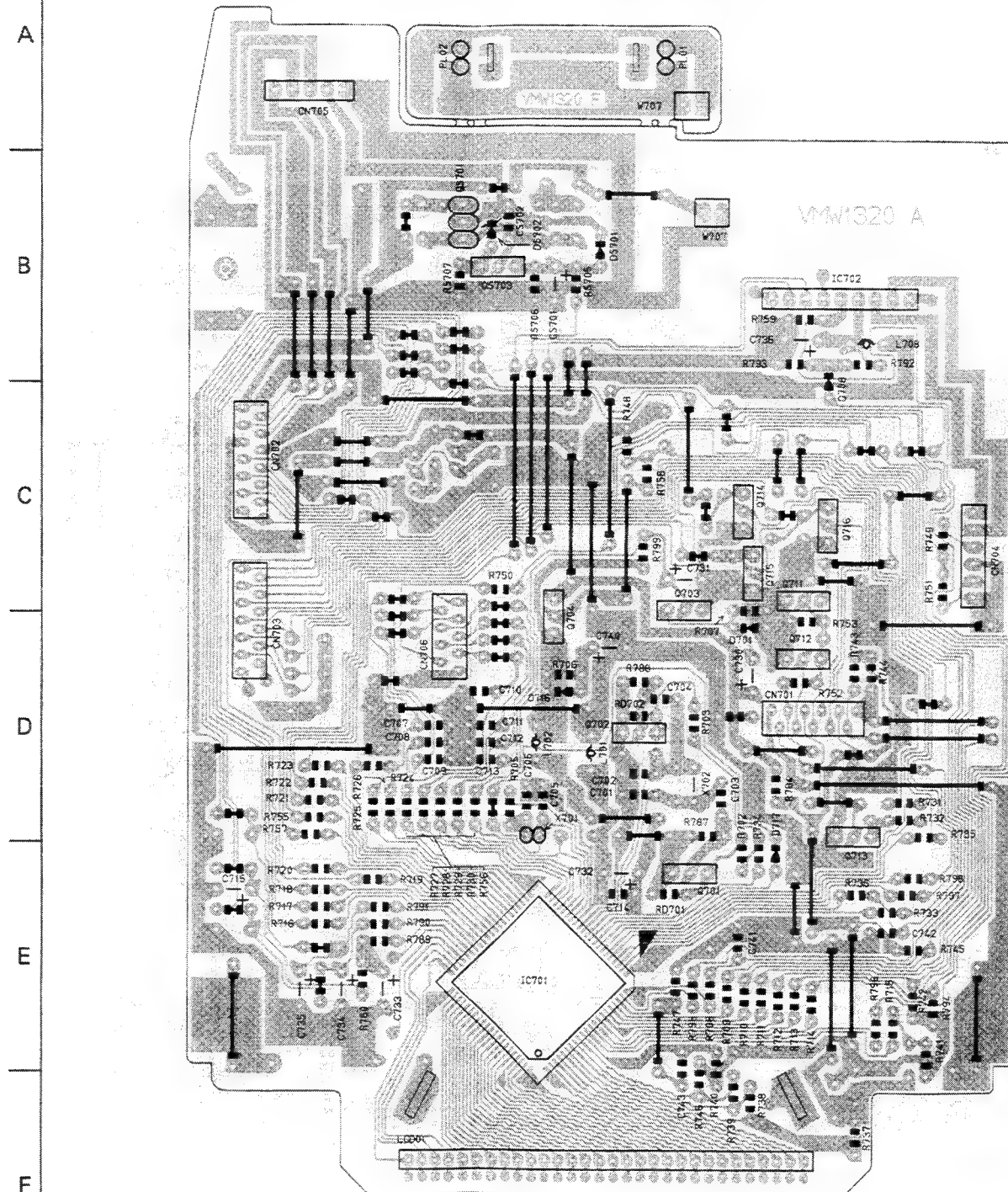


Fig. 12-3

■ CD Door Motor P.C. Board:
Drawing No. VMW1320E
Block No. 0 5

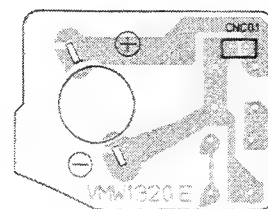


Fig. 12-4

■ Function P.C. Board: Drawing No. VMW1320B, Block No. 0 6

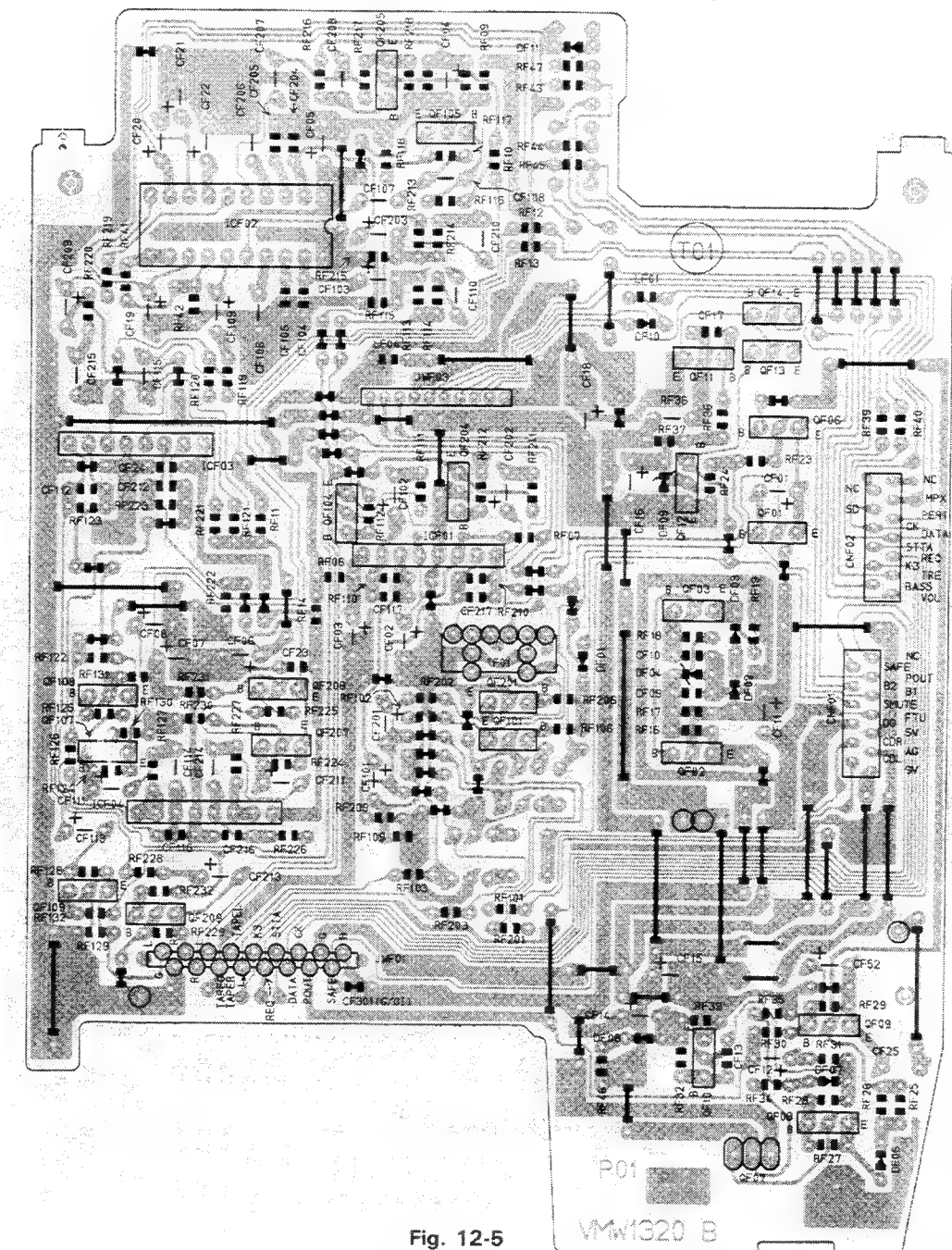


Fig. 12-5

■ CD Door Close Switch
P.C. Board
: Drawing No. VMW1320D
Block No. 0 5

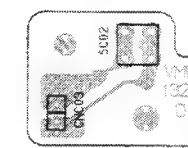


Fig. 12-6

■ CD Door Open Switch
P.C. Board
: Drawing No. VMW1320C
Block No. 0 5

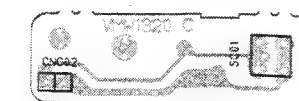
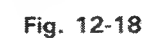
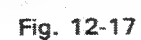


Fig. 12-7



- **Power Amplifier P.C. Board**

BLOCK NO. 02

REF.	PARTS NO	PARTS NAME	REMARKS	SUFFIX
CA151	QFV41HJ-224	TF CAPACITOR	-22MF 5% 50V	
CA152	QXB11CN-562Y	C CAPACITOR	5600PF 20% 16V	
CA153	QEK61AN-1072M	E CAPACITOR	100MF 20% 10V	
CA154	QETC1AN-1072N	E CAPACITOR	100MF 20% 10V	
CA155	QETC1CN-1072N	E CAPACITOR	100MF 20% 16V	
CA156	QETC1CN-1072N	E CAPACITOR	100MF 20% 16V	
CA157	QFV41HJ-224	TF CAPACITOR	-22MF 5% 50V	
CA158	QFV41HJ-224	TF CAPACITOR	-22MF 5% 50V	
CA160	QETC1AN-1072N	E CAPACITOR	100MF 20% 10V	
CA161	QETC1EN-3372N	E CAPACITOR	330MF 20% 25V	
CA162	QETB1EN-108N	E CAPACITOR	1000MF 20% 25V	
CA251	QFV41HJ-224	TF CAPACITOR	-22MF 5% 50V	
CA252	QXB11CN-562Y	C CAPACITOR	5600PF 20% 16V	
CA253	QEK61AN-1072M	E CAPACITOR	100MF 20% 10V	
CA254	QETC1AN-1072N	E CAPACITOR	100MF 20% 10V	
CA255	QETC1CN-1072N	E CAPACITOR	100MF 20% 16V	
CA256	QETC1CN-1072N	E CAPACITOR	100MF 20% 16V	
CA257	QFV41HJ-224	TF CAPACITOR	-22MF 5% 50V	
CA258	QFV41HJ-224	TF CAPACITOR	-22MF 5% 50V	
CA260	QETC1AN-1072N	E CAPACITOR	100MF 20% 10V	
CA261	QETC1EN-3372N	E CAPACITOR	330MF 20% 25V	
CA262	QETB1EN-108N	E CAPACITOR	1000MF 20% 25V	
CA351	QFVB1HJ-473	TF CAPACITOR	-047NF 5% 50V	
CA352	QFV11HJ-273AZM	TF CAPACITOR	-027NF 5% 50V	
CA353	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
CA354	VMC0289-S12	CONNECTOR	TO CH352	
DA351	MA700	ZENER DIODE		
DA352	MA700	ZENER DIODE		
DA353	MA165	SI DIODE		
DA354	MA165	SI DIODE		
ICA05	LA4496	IC	L-CH	
ICA06	LA4496	IC	R-CH	
QA151	2SD1302(S,T)	TRANSISTOR		
QA152	2SD1302(S,T)	TRANSISTOR		
QA251	2SD1302(S,T)	TRANSISTOR		
QA252	2SD1302(S,T)	TRANSISTOR		
RA151	QR0161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA152	QR0161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RA153	QR0161J-271	CARBON RESISTOR	270 5% 1/6W	
RA154	QR0161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RA155	QR0161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
RA156	QR0161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
RA157	QR0161J-282	CARBON RESISTOR	2.2 5% 1/6W	
RA158	QR0161J-282	CARBON RESISTOR	2.2 5% 1/6W	
RA160	QR0161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RA251	QR0161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA252	QR0161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RA253	QR0161J-271	CARBON RESISTOR	270 5% 1/6W	
RA254	QR0161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RA255	QR0161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
RA256	QR0161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
RA257	QR0161J-282	CARBON RESISTOR	2.2 5% 1/6W	
RA258	QR0161J-282	CARBON RESISTOR	2.2 5% 1/6W	
RA260	QR0161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RA251	QR0161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
RA252	QR0161J-560	CARBON RESISTOR	56 5% 1/6W	

- **Power Supply P.C. Board**

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 951	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
C 952	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
C 953	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
C 954	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
C 955	QETH1EM-828	E CAPACITOR	DECUP	
CN352	VMC0289-P12	CONNECTOR	TO CN351	
CN353	VMC0040-005Z	CONNECTOR 1M	TO JW6	
CN951	VMC0289-P08	CONNECTOR	2ND	
CN952	VMC0289-S08	CONNECTOR	2ND	
CN953	VMC0289-S10	CONNECTOR		
CN954	VMC0289-P10	CONNECTOR	1 ST	
CN955	VMZ0076-002A	CONNECTOR		
D 951	1N5401F	SI DIODE		
D 952	D58BA20-4001	SI DIODE		
J 351	EMB90YV-401A	SPK TERMINAL		
J 352	EMV7127-017	CONN. TERMINAL		
J 951	QMA431B-V01	DC JACK		

- **Mechanism Control P.C. Board**

A	REF.	PARTS NO.	PARTS NAME	REMARKS		SUFFIX
C 801	QCVB1CM-103Y	C CAPACITOR	.010MF 20X 16V			
C 802	QEK41CM-476	E CAPACITOR	47MF 20X 16V			
C 803	QCVB1CM-103Y	C CAPACITOR	.010MF 20X 16V			
C 804	QEK41CM-476	E CAPACITOR	47MF 20X 16V			
C 805	QCVB1CM-272Y	C CAPACITOR	2700PF 20X 16V			
C 806	QCFB1HZ-104Y	C CAPACITOR	1.0MF +80%-20%			
C 810	QEK41HM-105	C CAPACITOR	1.0MF 20X 50V			
C 811	QCBB1HK-331Y	C CAPACITOR	330PF 10X 50V			
C 812	QCBB1CM-103Y	C CAPACITOR	.010MF 20X 16V			
C 820	QFV41HJ-224	TF CAPACITOR	.22MF 5X 50V			
C 831	QFV41HJ-224	TF CAPACITOR	.22MF 5X 50V			
C 822	QCBB1HK-151Y	C CAPACITOR	150PF 10X 50V			
C 823	QCBB1HK-681Y	E CAPACITOR	680PF 10X 50V			
C 832	QEK41CM-476	E CAPACITOR	47MF 20X 16V			
C 833	QFLA1HJ-682ZM	M CAPACITOR	6800PF 5X 50V			
C 834	QFLA1HJ-682ZM	M CAPACITOR	6800PF 5X 50V			
C 855	QFLA1HJ-562ZM	M CAPACITOR	5600PF 5X 50V			
C 856	QFLA1HJ-562ZM	M CAPACITOR	5600PF 5X 50V			
C 857	QEK41CM-476	E CAPACITOR	47MF 20X 16V			
C 861	QCVB1CM-103Y	E CAPACITOR	.010MF 20X 16V			
C 863	QEK61AM-107ZM	E CAPACITOR	100MF 20X 10V			
C 865	QCVB1CM-103Y	E CAPACITOR	.010MF 20X 16V			
CA101	QEK41HM-225	E-CAPA.	2.2MF 20X 50V			
CA102	QCBB1HK-102Y	C CAPACITOR	1000PF 10X 50V			
CA103	QFV71HJ-103	TF CAPACITOR	.010MF 5X 50V			
CA104	QEK61AM-107ZM	E CAPACITOR	100MF 20X 10V			
CA105	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V			
CA110	QEK41HM-474	E CAPACITOR	.47MF 20X 50V			
CA111	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V			
CA112	QCXB1CM-222Y	C CAPACITOR	2200PF 20X 16V			
CA113	QCBB1HK-102Y	C CAPACITOR	1000PF 10X 50V			
CA114	QFV41HJ-224	TF CAPACITOR	.22MF 5X 50V			
CA115	QEK41HM-225	E-CAPACITOR	2.2MF 20X 50V			
CA116	QEK41EM-475	E-CAPACITOR	4.7MF 20X 25V			
CA120	QFV41HJ-104	TF CAPACITOR	.10MF 5X 50V			
CA121	QEK41EM-475	E-CAPACITOR	4.7MF 20X 25V			
CA122	QCXB1CM-222Y	C CAPACITOR	2200PF 20X 16V			
CA123	QCBB1HK-102Y	C CAPACITOR	1000PF 10X 50V			
CA124	QFV11HJ-153AZM	TF CAPACITOR	.015MF 5X 50V			
CA125	QFV41HJ-223	TF CAPACITOR	.022MF 5X 50V			
CA126	QER41HM-105VM	E CAPACITOR	1.0MF 20X 50V			
CA127	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V			
CA128	QCBB1HK-102Y	C CAPACITOR	1000PF 10X 50V			
CA129	QCBB1HK-151Y	C CAPACITOR	150PF 10X 50V			
CA130	QCBB1HK-331Y	C CAPACITOR	330PF 10X 50V			
CA139	QEK41HM-474	E CAPACITOR	.47MF 20X 50V			
CA150	QFV11HJ-273AZM	TF CAPACITOR	.027MF 5X 50V			
CA201	QEK41HM-225	E-CAPA.	2.2MF 20X 50V			
CA202	QCBB1HK-102Y	C CAPACITOR	1000PF 10X 50V			
CA203	QFV71HJ-103	TF CAPACITOR	.010MF 5X 50V			
CA204	QEK61AM-107ZM	E CAPACITOR	100MF 20X 10V			
CA205	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V			
CA210	QEK41HM-474	E CAPACITOR	.47MF 20X 50V			
CA211	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V			
CA212	QCXB1CM-222Y	C CAPACITOR	2200PF 20X 16V			

- **Head Phone Jack P.C. Board**

[illegible]

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
D 801	MA165	SI DIODE		
D 851	MTZ8-2JC	Z DIODE		
D 852	MA165	SI DIODE		
D 853	MA165	SI DIODE		
D 854	MTZ5-1JB	Z DIODE		
DA101	MA165	SI DIODE	ALC DET	
DA102	MA165	SI DIODE	ALC DET	
DA201	MA165	SI DIODE	ALC DET	
DA202	MA165	SI DIODE	ALC DET	
DA301	MA165	SI DIODE		
DA302	MA165	SI DIODE		
DA303	MA165	SI DIODE		
DA304	MTZ5-1JC	Z DIODE		
IC301	UPC1228HA	IC	PB AMP	
IC302	UPC1330HA	IC	R/P SW	
IC303	LA3220	IC		
IC304	HA12134A	IC		
IC801	TAB409S	IC		
IC802	TAB409S	IC		
IC803	L793068	IC		
L 801	VGH1008-055	OSC COIL(BIAS)		
L 802	VGP0028-100Z	INDUCTOR		
LA120	VGP0001-183	INDUCTOR		
LA121	VGP0001-562ZS	INDUCTOR		
LA220	VGP0001-183	INDUCTOR		
LA221	VGP0001-562ZS	INDUCTOR		
Q 801	2SA952(L,K)	TRANSISTOR		
Q 802	DTC144ES	TRANSISTOR		
Q 803	UN4213	TRANSISTOR		
Q 804	UN4212	TRANSISTOR		
Q 808	2SB772(Q,P)	TRANSISTOR		
Q 809	2SC2785(HFE)	TRANSISTOR		
Q 810	2SC2785(HFE)	TRANSISTOR		
QA101	UN4210	TRANSISTOR		
QA102	2SD1302(S,T)	TRANSISTOR	PB MUTE	
QA103	2SD1302(S,T)	TRANSISTOR	REC MUTE	
QA104	UN4210	TRANSISTOR	CROM SW	
QA105	2SD1302(S,T)	TRANSISTOR		
QA201	UN4210	TRANSISTOR		
QA202	2SD1302(S,T)	TRANSISTOR		
QA203	2SD1302(S,T)	TRANSISTOR	PB MUTE	
QA204	UN4210	TRANSISTOR	REC MUTE	
QA205	2SD1302(S,T)	TRANSISTOR	CROM SW	
QA300	UN4111	TRANSISTOR		
QA301	2SC2785(HFE)	TRANSISTOR		
QA302	2SC2785(HFE)	TRANSISTOR		
QA303	UN4210	TRANSISTOR	ALC SW	
QA304	DTA114ES	TRANSISTOR		
QA305	DTC144ES	TRANSISTOR		
QA306	2SC2785(HFE)	TRANSISTOR		
QA307	2SC1845	TRANSISTOR		
QA308	2SC2785(HFE)	TRANSISTOR		
QA309	2SC1845	TRANSISTOR		
QA310	2SD1302(S,T)	TRANSISTOR		
QA311	2SD1302(S,T)	TRANSISTOR		

BLOCK NO. 08				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RF 19	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF 23	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RF 24	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RF 25	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RF 26	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RF 27	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W	
RF 28	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
RF 29	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RF 30	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF 31	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF 32	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RF 33	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RF 34	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF 36	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RF 37	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF 38	QRD12CJ-470SX	CARBON RESISTOR	47 5% 1/2W	
RF 39	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RF 40	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RF 41	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF 42	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF 43	QRD161J-334	CARBON RESISTOR	PWM VOL	
RF 44	QRD161J-563	CARBON RESISTOR	PWM BASS	
RF 45	QRD161J-563	CARBON RESISTOR	PWM TRE	
RF 46	QRD167J-121	CARBON RESISTOR	120 5% 1/6W	
RF 47	QRD161J-334	CARBON RESISTOR	PWM VOL	
RF101	QRD161J-273	CARBON RESISTOR	CD	
RF102	QRD167J-682	CARBON RESISTOR	TUNER	
RF103	QRD161J-472	CARBON RESISTOR	TAPE	
RF106	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF109	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
RF110	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
RF111	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RF112	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF113	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RF114	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RF115	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RF116	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
RF117	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RF118	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RF119	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RF120	QRD161J-362	CARBON RESISTOR	3.6K 5% 1/6W	
RF121	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF122	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RF123	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF124	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF125	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RF126	QRD161J-364YT	CARBON RESISTOR	360K 5% 1/6W	
RF127	QRD161J-431YT	CARBON RESISTOR	430 5% 1/6W	
RF128	QRD161J-470	CARBON RESISTOR	47 5% 1/6W	
RF129	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF130	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RF131	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RF132	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RF201	QRD161J-273	CARBON RESISTOR	CD	
RF202	QRD167J-682	CARBON RESISTOR	TUNER	

BLOCK NO. 09				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RF203	QRD161J-473	CARBON RESISTOR	TAPE	
RF204	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF209	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
RF210	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
RF211	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RF212	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF214	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RF215	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RF216	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RF217	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
RF218	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RF219	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RF220	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RF221	QRD161J-362	CARBON RESISTOR	3.6K 5% 1/6W	
RF222	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF223	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RF224	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF225	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RF226	QRD161J-364YT	CARBON RESISTOR	360K 5% 1/6W	
RF227	QRD161J-431YT	CARBON RESISTOR	430 5% 1/6W	
RF228	QRD161J-470	CARBON RESISTOR	47 5% 1/6W	
RF229	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF230	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RF231	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RF232	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
SC 01	QSP2K21-V01	PUSH SWITCH	CD DOOR OPEN	
SC 02	QSP2K21-V01	PUSH SWITCH	CD DOOR CLOSE	
TF 01	EF0F0101-002	FILTER	DOLBY FILTER	

• Operation Key Switch P.C. Board

BLOCK NO. 07				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CN708	VMC0163-R11	CONNECTOR		
CS 01	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
D 709	1S5133	SI DIODE		
D 710	SLR-34VCF25	LED I-M	AHB	
D 711	SLR-34MCF39	LED I-M	BEAT	
D 712	SLR-34MCF39	LED I-M	VOCAL	
D 713	SLR-34MCF39	LED I-M	INSTR.	
D 714	SLR-34VRF39	LED	STAND-BY	
IC703	SX1785-52	RM RECIVER		
R 761	QRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
R 762	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 763	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 764	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 765	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 766	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 767	QRD161J-362	CARBON RESISTOR	3.6K 5% 1/6W	
R 768	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 769	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 770	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 771	QRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
R 772	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 773	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 774	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 775	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 776	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 777	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 778	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 779	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 780	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 781	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 782	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 783	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
S 701	QSQ1A11-V04Z	TACT SW	POWER	
S 702	QSQ1A11-V04Z	TACT SW	EJECT	
S 703	QSQ1A11-V04Z	TACT SW	AHB	
S 704	QSQ1A11-V04Z	TACT SW	SOUND	
S 705	QSQ1A11-V04Z	TACT SW	CD PLAY	
S 706	QSQ1A11-V04Z	TACT SW	CD STOP	
S 707	QSQ1A11-V04Z	TACT SW	TUNER	
S 708	QSQ1A11-V04Z	TACT SW	FM MODE	
S 709	QSQ1A11-V04Z	TACT SW	TRE. +	
S 710	QSQ1A11-V04Z	TACT SW	TRE. -	
S 711	QSQ1A11-V04Z	TACT SW	BASS +	
S 712	QSQ1A11-V04Z	TACT SW	BASS -	
S 713	QSQ1A11-V04Z	TACT SW	VOL. +	
S 714	QSQ1A11-V04Z	TACT SW	VOL. -	
S 715	QSQ1A11-V04Z	TACT SW	UP	
S 716	QSQ1A11-V04Z	TACT SW	DOWN	
S 717	QSQ1A11-V04Z	TACT SW	CLOCK	
S 718	QSQ1A11-V04Z	TACT SW	TIMER	
S 719	QSQ1A11-V04Z	TACT SW	ENTER	

• CD Amplifier P.C. Board

BLOCK NO. 08				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 501	QCB81HK-821Y	C CAPACITOR	820PF 10% 50V	
C 503	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
C 504	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
C 511	QCSB1HK-3R9	C CAPACITOR	3.9PF 10% 50V	
C 512	QCS11HJ-270	C CAPACITOR	27PF 5% 50V	
C 513	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
C 514	QFJ31HJ-472ZN	M CAPACITOR	4700PF 5% 50V	
C 521	QCB81HK-331Y	C CAPACITOR	330PF 10% 50V	
C 522	QFLC1HJ-473ZM	M CAPACITOR	.047MF 5% 50V	
C 523	QFV71HJ-154ZM	TF CAPACITOR	.15MF 5% 50V	
C 524	QEPCE1EM-475ZM	NP E CAPACITOR	4.7MF 20% 25V	
C 529	QETC1AM-336ZN	E CAPACITOR	33MF 20% 10V	
C 531	QCVB1CM-822Y	C CAPACITOR	8200PF 20% 16V	
C 541	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V	
C 542	QFV71HJ-103	TF CAPACITOR	.010MF 5% 50V	
C 543	QFV41HJ-393ZM	TF CAPACITOR	.039MF 5% 50V	
C 545	QEPCE1EM-105ZM	NP E CAPACITOR	1.0MF 20% 50V	
C 546	QFLC1HJ-223ZM	M CAPACITOR	.022MF 5% 50V	
C 561	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
C 562	QETC1HM-475ZM	E CAPACITOR	4.7MF 20% 50V	
C 581	QETC1AM-477ZM	E CAPACITOR	470MF 20% 10V	
C 582	QER61CM-107ZM	E CAPACITOR	100MF 20% 16V	
C 584	QER41AM-107	E CAPACITOR	100MF 20% 10V	
C 591	VCPO012-105Z	C CAPACITOR		
C 592	VCPO012-105Z	C CAPACITOR		
C 593	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
C 599	QETC1AM-107ZM	E CAPACITOR	100MF 20% 10V	
C 601	QCS11HJ-100	C CAPACITOR	FOR CRYSTAL	
C 602	QCS11HJ-100	C CAPACITOR	FOR CRYSTAL	
C 603	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 604	QCC11EM-104V	C CAPACITOR	.10MF 20% 25V	
C 605	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
C 606	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 611	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
C 612	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
C 613	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
C 614	QFN41HJ-332	M CAPACITOR	3300PF 5% 50V	
C 615	QFN41HJ-332	M CAPACITOR	3300PF 5% 50V	
C 631	QETC1AM-107ZM	E CAPACITOR	100MF 20% 10V	
C 632	QETC1AM-107ZM	E CAPACITOR	100MF 20% 10V	
C 635	QCB81HK-121Y	C CAPACITOR	120PF 10% 50V	
C 651	QETC1AM-107ZM	E CAPACITOR	100MF 20% 10V	
C 652	QETC1CM-226ZN	E CAPACITOR	22MF 20% 16V	
C 661	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
C 662	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
C 663	QCB81HK-121Y	C CAPACITOR	120PF 10% 50V	
C 669	QER61EM-335Z	E CAPACITOR	3.3MF 20% 25V	
C 671	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
C 672	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
C 673	QCB81HK-121Y	C CAPACITOR	120PF 10% 50V	
C 679	QER61EM-335Z	E CAPACITOR	3.3MF 20% 25V	
CN501	VMC0272-015	CONNECTOR	TO PICK UP	
CN601	VMC0163-R09	CONNECTOR	TO CPU	
IC501	TAB191F	IC	SERVO LSI	
IC502	BA6298FP	IC	POWER DRIVER	

BLOCK NO. 00111111

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	IC601	TC9236AF	IC	1 CHIP PROCESSE	
	IC603	TC9278F	IC	D/A CONVERTER	
	IC604	XRA15218M	IC	L.P.F	
	K 693	VQ20048-009	INDUCTOR	FOR FTZ	
	L 691	VQPO018-100	INDUCTOR	FOR FTZ	
	L 692	VQPO018-100	INDUCTOR	FOR FTZ	
	L 693	VQPO028-100Z	INDUCTOR	FOR FTZ	
	Q 501	2SA952(L,K)	TRANSISTOR		
	Q 581	2SA952(L,K)	TRANSISTOR		
	Q 591	2SA1309(JR)	TRANSISTOR	5V REGULATOR	
	R 501	GRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R 502	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 504	GRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
	R 505	GRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R 506	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 511	GRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R 512	GRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 513	GRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 514	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 515	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 516	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 517	GRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
	R 521	GRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R 522	GRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 523	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 524	GRD161J-331	CARBON RESISTOR	330 5% 1/6W	
	R 525	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 529	GRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 531	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 532	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 533	GRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R 541	GRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R 542	GRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 543	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 544	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 545	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 548	GRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R 549	GRD161J-821	CARBON RESISTOR	820 5% 1/6W	
	R 550	GRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 551	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 552	GRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 553	GRD161J-821	CARBON RESISTOR	820 5% 1/6W	
	R 555	GRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 559	GRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
	R 561	GRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 562	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 563	GRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R 564	GRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 565	GRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
	R 566	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 583	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 591	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 611	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 612	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 613	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 001	QCS11HJ-200	C CAPACITOR	20PF 5% 50V	
C 003	QCSB1HK-3R3Y	C CAPACITOR	3.3PF 10% 50V	
C 004	QCSB1HM-1R5Y	C CAPACITOR	1.5PF 20% 50V	
C 005	QCT050UJ-100	C CAPACITOR	10PF 5% 50V	
C 006	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 007	QCT30CH-200Y	C CAPACITOR	20PF 5% 50V	
C 008	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 009	QCT30UJ-8R2Y	C CAPACITOR	8.2PF 5% 50V	
C 010	QCSB1HM-1R0Y	C CAPACITOR	1.0PF 20% 50V	
C 011	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 012	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 013	QCC11EM-223V	C CAPACITOR	.022MF 20% 25V	
C 016	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 017	QCFB1H2-104Y	C CAPACITOR	.10MF +80% -20%	
C 018	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 019	QCT30UJ-8R2Y	C CAPACITOR	8.2PF 5% 50V	
C 020	QEK61AM-1072M	E CAPACITOR	100MF 20% 10V	
C 021	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 022	QFP31HG-4312M	PP CAPACITOR	430PF 2% 50V	
C 023	QCT30UJ-120Y	C CAPACITOR	12PF 5% 50V	
C 024	QCS11HJ-560	C CAPACITOR	56PF 5% 50V	
C 025	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
C 026	QCS11HJ-181	C CAPACITOR	180PF 5% 50V	
C 027	QCS11HJ-101	C CAPACITOR	100PF 5% 50V	
C 028	QCS11HJ-180	C CAPACITOR	18PF 5% 50V	
C 029	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
C 030	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 031	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 032	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 033	QEK61AM-1072M	E CAPACITOR	100MF 20% 10V	
C 034	QCC31EM-3332V	C CAPACITOR	.033MF 20% 25V	
C 035	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 036	QEK41HM-4752N	E CAPACITOR	4.7MF 20% 50V	
C 037	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 038	QCSB1HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 039	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 040	QEK61HM-4752N	E CAPACITOR	4.7MF 20% 50V	
C 041	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 042	QCVB1CN-152Y	C CAPACITOR	1500PF 20% 16V	
C 043	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 044	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
C 045	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
C 046	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 047	QCC11EK-1532V	C CAPACITOR	.015MF 10% 25V	
C 048	QCC11EK-1532V	C CAPACITOR	.015MF 10% 25V	
C 049	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 050	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 053	QCS11HJ-150	C CAPACITOR	15PF 5% 50V	
C 054	QCC11EM-223V	C CAPACITOR	.022MF 20% 25V	
C 055	QCSB1HK-2R2Y	C CAPACITOR	2.2PF 10% 50V	
C 058	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 059	QCSB1HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 060	QCSB1HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 061	QEK61AM-1072M	E CAPACITOR	100PF 20% 10V	
C 062	QCSB1HJ-130Y	C CAPACITOR	13PF 5% 50V	

10. Wiring Connection

■ Tape Deck/Amplifier Section

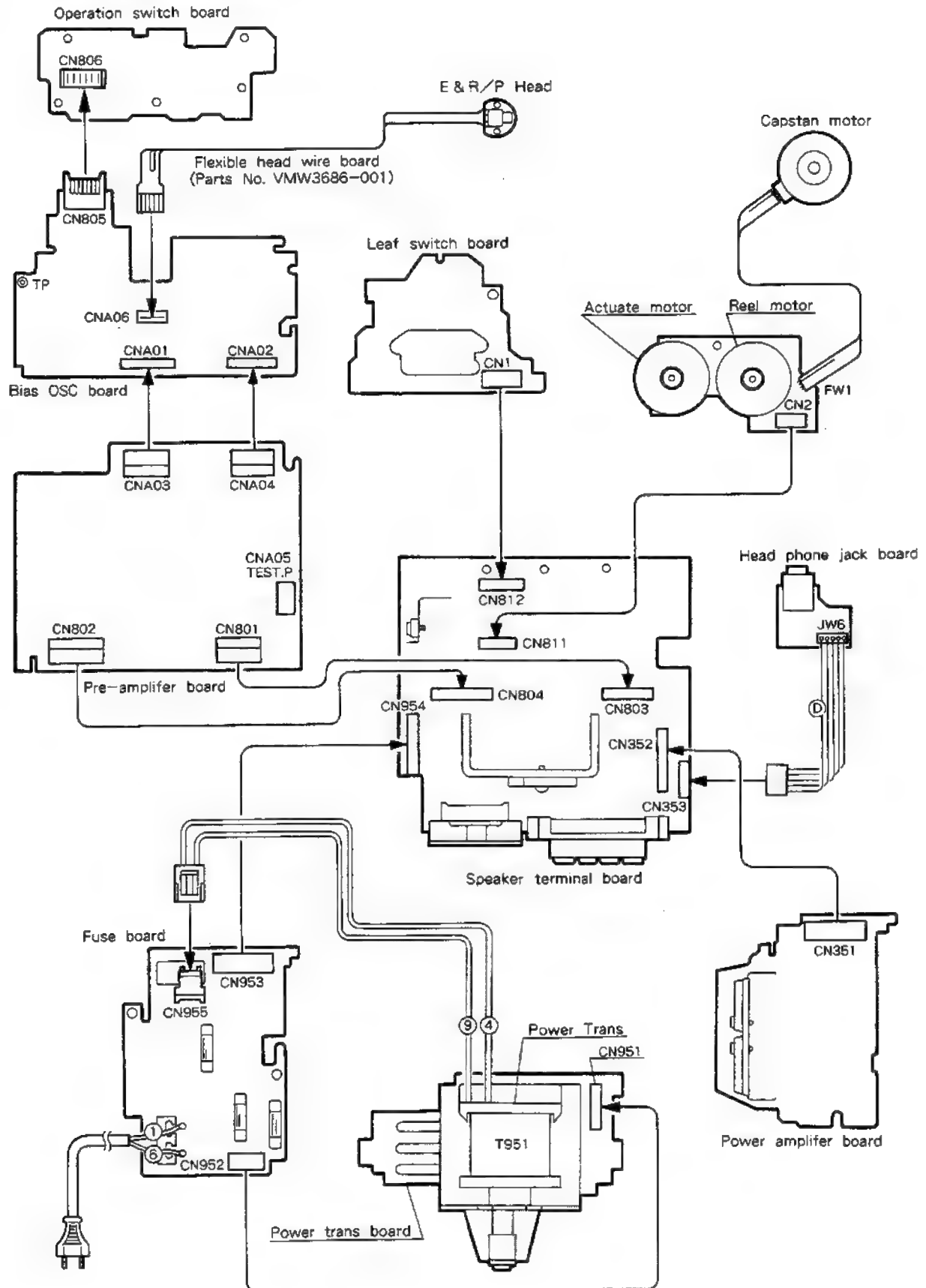


Fig. 10-1

9. Block Diagram

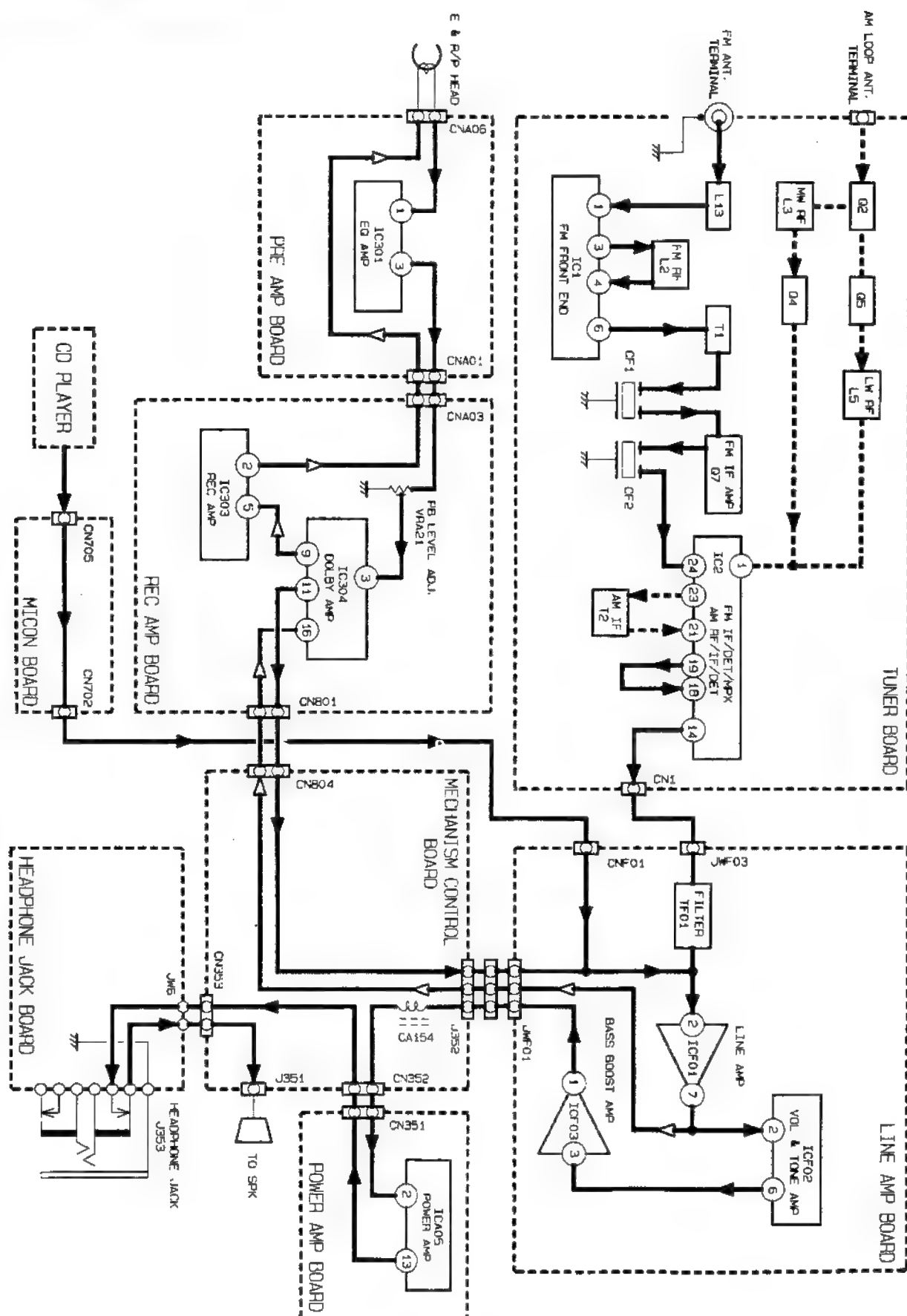
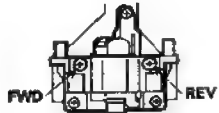
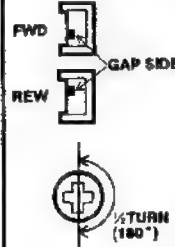
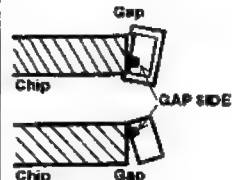
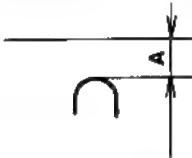


Fig. 9-1

■ Cassette mechanism specification

Item	Specitication	condition	Posture
1. Winding torque (g-cm)	PLAY FF/REW :27~60g-cm (Both , FWD, :90~200g-cm REV)	Cassette tape TW2111A(for FWD) TW2231A(for FF/REV) TW2121A(for REV)	Sideways
2. Speed devalation	FWD at tape :4.8cm/sec Deviation of speed end VVT 712 :2940~3060Hz between FWD/REV to be within 4.5Hz.	VVT 712 Wow/Flutter meter	Sideways
3. WOW/FL (%)	At bigining of :JIS wrms tape and below 0.18% end.VVT 712 (Both FWD, REV)	VVT 712 Wow/Flutter meter	Sideways
4. Back tension (g-cm)	In in play :1.0~5.0g-cm (Both FWD, REV)	Cassette tape TW2111 (for FWD) TW2422 (for REV)	Sideways
5. Winding torque (g-cm)	In play :Above 90g-cm (Both FWD, REV)	Cassette tape TW2412 (for FWD) TW2422 (for REV)	Sideways
6. E, head tilt	Both FWD, REV :90° ± 45°	M300 gauge 45' chip	Sideways

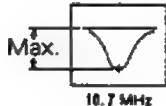

■ Cassette mechanism part

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
1. Thrust gap flywheel		Check with finger feeling.	0.2 - 1.0mm (BOTH FWD, REV)	
2. Mecha operation	Mecha control	Following operation to be normal (Both FWD, REV) and, in that time, noise, vibration should not occur. (Running noise during PLAY, FF, REW, is accepted if noise can't be heard with loading cassette type.)	PLAY, DIR, FF, REW, SCAN (FF, REW), PAUSE, STOP	
3. Signal of auto stop	Mecha control	Lead light to be on and off normally play (SIG) (Caution: Without tape fwd side only, led to be on and off.)		
4. Leaf switch position		1. All switch leds, should light when putting cassette gauge for confirming leaf SW on. 2. All SW leds should not light when putting cassette gauge for confirming leaf SW off.		
5-1. Azimuth	M300 gauge t=3.4mm chip VVT 704(12.5KHz)	Adjust azimuth to the peak point by play back 12.5KHz. At that time, difference Lch - Rch below 4dB and difference Lch - Rch FWD/REV below 3dB.		
5-2. Guide height	Head amp	t=3.4mm chip can be inserted into guide of R/P head after adjusting azimuth.(t=3.4mm chip can after be inserted into dummy guide, both FWD, REV.)		
5-3. Tape running	Upper side curling of FWD, lower side curling of REV. Lower side curling of FWD, upper side curling of REV	Curl running should not occur at guide of R/P head with loading C-90 at middle.(Both FWD, REV) Curling at opposite of gap is corrected by turning azimuth screw within 1/2 turns can be acceptable.(After checking above item azimuth screw to be returned to previous position.) Curling at gap side is corrected by turning azimuth screw within 1/4 turns can be acceptable (After checking above item, azimuth screw to be returned to be returned to previous position.)		MECHA CONTROL C-90 
5-4. Stretching		Stretching not to occur at the beginning of C-90. (Without pad)	Sampling check	C-90
5-5. Head position	IN PLAY A 3.10~3.65mm (3.25~3.80) IN MS A 4.4~5.1mm (1.8~2.5)			Head position jig. Figures in () is against standard cassette guide
6. Separation		Reversing L and R cross talk not to occur by play back 1KHz.		Mecha control OSC scope VVT 752

Tuner Section

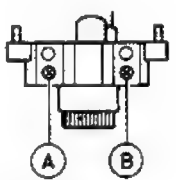
Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
LW RF tracking check and adjust (All version)	Band select : LW Tuner Input : Standard loop antenna Measuring point : TP9	<ul style="list-style-type: none"> Frequency of SSG : 144 kHz Number preset memory : Max. capacity (M6) <ol style="list-style-type: none"> Adjust L6 to obtain $1.1V \pm 0.02V$ at TP9. Frequency range : 144 kHz Receive 144 kHz (M6) Receive 144 kHz signal from an AM oscillator by the set while adjusting L5 to maximize headphone output. Frequency range : 288 kHz Receive 288 kHz (M7) Receive 288 kHz signal from an AM oscillator by the set while adjusting TC3 to maximize headphone output. Repeat the above steps 2. and 3. to obtain maximum outputs respectively. 	$1.1V \pm 0.02V$ Output level : Maximum	L6 L5 TC3 L5, TC3
MW or AM RF tracking check and adjust (All version))	Band select : AM or MW Tuner Input : Standard loop antenna	<ol style="list-style-type: none"> Receive 603 kHz signal (preset No.3) from the AM oscillator by the set while adjusting L3 to maximize headphone output. Receive 1404 kHz signal from an AM oscillator by the set while adjusting TC2 to maximize headphone output. Repeat the above steps 1. and 2. to obtain maximum outputs respectively. 	Output level : maximum	L3 TC2 L3, TC2
FM RF tracking check and adjust (UX – A4 B)	<ul style="list-style-type: none"> Band select : FM Tuner input : Dummy antenna for unbalanceed 75 Ω 	<ul style="list-style-type: none"> Receive 88 MHz signal (preset No.3) from an FM oscillator by the set while adjusting L2 to maximize headphone output . 	Output level : maximum	L2
FM RF tracking check and adjust (UX – A4 E / G / GI / EN)	<ul style="list-style-type: none"> Positive side to TP1 Negative side to TP2 	<ol style="list-style-type: none"> Adjust L1 to obtain $1.3V \pm 0.02V$ at TP9. G/GI version use : $1.0V \pm 0.02V$. Receive 88 MHz signal from an FM oscillator by the set while adjusting L2, L13 to maximize headphone output. Next, receive 106 MHz signal while adjusting TC1, TC4 to maximize headphone output. Repeat the above steps 2. and 3. to obtain maximum outputs respectively. 	$1.3 \pm 0.02V$ G/GI version : $1.0 \pm 0.02V$	L2, L13 TC1, TC4

Tuner Section

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
AM IF adjust and check (All version)	<ul style="list-style-type: none"> •Band select : MW or AM •Receiving frequency : Near the upper band edge where no signal comes in. •Volume control : Minimum gain position. •Tuner Input : Positive side to TP3 •Tuner output : Positive side to TP6 : Negative side to TP7 	<ul style="list-style-type: none"> •Adjust above mentioned aligning position, so that maximum and symmetrical wave from (See Fig.a) can be obtained, in this case, the wave peak should appear on the center marker(450kHz) in the scope of sweeper. •On the AM IF circuit, IF filter is solid units, so there is unnecessary for IF tuning. •In case if tuning may be needed (Repair etc.), do the above mentioned alignment. <div style="text-align: right;">  <p>10.7 MHz</p> <p>Fig.a</p>  <p>10.7 MHz</p> <p>Fig.b</p> </div>		T2
FM IF adjust and check (All version)	<ul style="list-style-type: none"> •Band select : FM •Receiving frequency •Volume control : Minimum gain position. •Tuner input : Positive side to TP5 •Tuner output : Positive side to TP6 : Negative side to TP7 	<ol style="list-style-type: none"> ① Remove CF3 so that " S " curve may be changed to IF wave from as shown Fig. a. Adjust T1 farther more to obtain maximum and balanced wave from . ② Put back CF3 so that " S " curve on the scope may obtain maximum and balanced wave from as shown Fig.b. <ul style="list-style-type: none"> * On the FM circuit, IF filter and discriminator is solid units so there is unnecessary for IF tuning. In case IF tuning may be needed (Repair etc.), do that above mentioned alignment. * Note for G/GI , E/EN version <ol style="list-style-type: none"> ① As to " G/GI " , " E/EN " version, FM IF alignment is necessary. ② Receive 98MHz, 22.5 kHz dev. Input level, about - 3dB limiting sensitivity level. ③ Adjust T1, no farther improvement. 		T1

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Recording /playback frequency response check and adjustment	Test tape : UR(Normal tape) Standard frequency : 1 kHz (REF. - 20dB) Test point IN : AUX IN Test point OUT : DOLBY TP	While inputting REF. - 20dB from AUX IN, perform recording and replay with the normal tape TS8 . At this time, confirm the output with VRA13(Lch) and VRA23(Rch) so that the deviation between 1.25 kHz and 12.5 kHz at the DOLBY TP becomes 0 ± 1 dB.	1.25/ 12.5 kHz : 0 ± 1 dB	Lch : VRA13 Rch : VRA23
Recording /playback sensitivity adjustment	Test tape : UR(Normal tape) Test point In : AUX IN Test point out : DOLBY TP	① While inputting REF.1 kHz to AUX IN perform recording and replay with the normal tape TS8. ② Adjust Lch and Rch respectively with VRA12 and VRA22 so that the output at the DOLBY test point at this time becomes 0 ± 1 dB. ③ Next, perform recording and replay with the chromium tape TS10 and metal tape TS11 according to the same procedures in the Step ① . ④ Confirm that the DOLBY TP output at this time is 0 ± 1 dB.	Reference level : Monitor level Within 0 ± 1 dB	Lch : VRA12 Rch : VRA22
Recording / playback distortion check	Test tape : UR(Normal tape) Test point In : AUX Test point : DOLBY TP	Supply 1 kHz, - 8 dBs signal to the AUX and record it. Play it back while checking that distortion is less than 5 %.	Less than 5 %	-
Bias frequency adjustment	• Tape mode • Test point : DOLBY TP	Switch tape select to Normal position. In case that the bias frequency is out of specification, L801 should be readjusted to standard and set to Tuner, Recording position for alignment. ① Adjust bias frequency at FM mode. ② Confirm bias frequency at AMmode.	DOLBY TP : 100 ± 0.2 kHz	L801

Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustment	Test tape :VTT704(12.5kHz) Test point :Headphones	① Playback the test tape VTT704(12.5kHz) in the forward direction, adjust the head azimuth screw (A) to maximize the headphones output while minimum the phase difference between channels ② Playback the test tape in the reverse direction, adjust the head azimuth screw (B) for the same purpose as the forward playback. ③ Deviation forward and reverse : within 3 dB ※ Whenever the head is changed the azimuth should be readjusted.	Output : within - 2dB from the peak Phase difference : minimum  Fig. 2	Head azimuth screw
Tape speed adjustment	Test tape : VTT712(3kHz) Test point : Headphone	Playback the test tape VTT712 (3kHz) at the tape end position. Should the following tape speed is out of specification, it is necessary to adjust the VR801 so that standard value obtain within 3000~3020 Hz.	Normal speed : within 3000~3020Hz	VR801
Wow and flutter check	Test tape :VTT712(3kHz) Test point :Headphone	Playback the test tape VTT712(3kHz) to tape start, middle and end position. Wow and flutter should be within the following allowance at the three positions.	Playback FWD / REV should be less than 0.2% (JIS RMS)	—
Playback output level adjustment	Test tape :VTT724(1kHz) Test point : DOLBY TP	1. Playback the test tape VTT724(1kHz) and switch the tape select to NORMAL position. 2. Adjust VRA11(Lch) and VRA21(Rch) so that standard value obtain less than - 11dB \pm 1 dB. 3. L, R difference level to be less than \pm 2dB.	Less than - 11dB \pm 1dB Less than \pm 2dB	Lch : VRA11 Rch : VRA21
Frequency response check	Test tape :VTT - 7063(1kHz) Test point : DOLBY TP(CNA05)	① Switch tape select to Normal position and playback the test tape VTT - 7063(1kHz). ② Confirm the output level at the DOLBY TP becomes as follows with reference to 1kHz. ③ Compare the level between 1 kHz and 63Hz , 1 kHz and 12.5kHz. ④ Then difference level should be within 0dB \pm 4 dB, 0 dB \pm 4dB.	63 Hz/ 1 kHz level : within 0 \pm 4dB 1kHz / 12.5kHz : within 0 \pm 4dB	—

Arrangement of adjusting positions

Tape deck/amplifier section

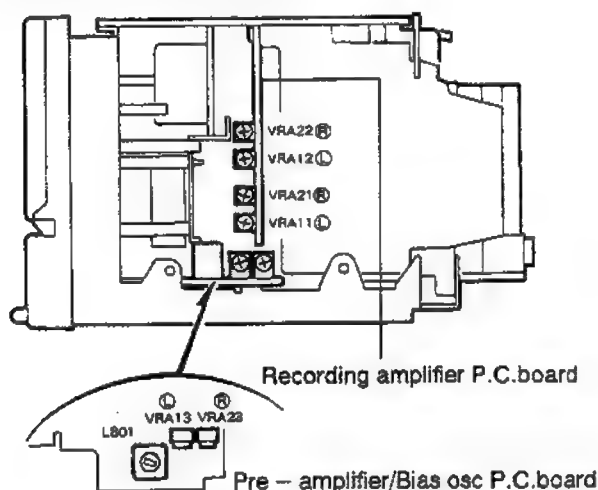


Fig. 8-1

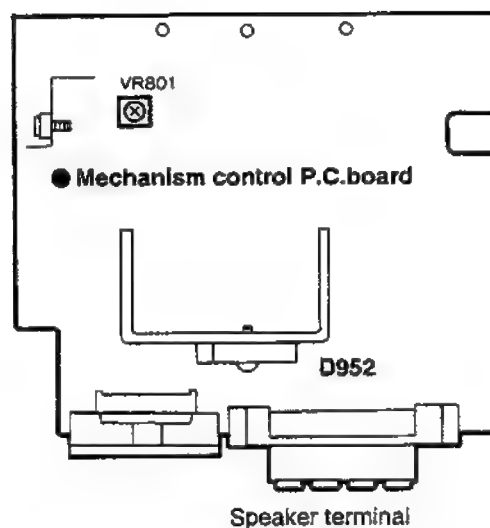


Fig. 8-2

CD player assembly section

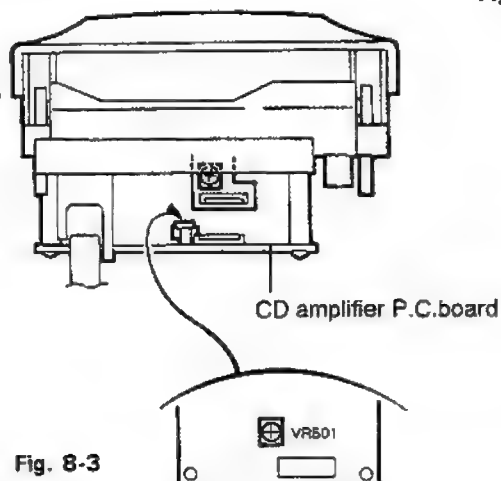


Fig. 8-3

Tuner P.C. board :UX - A4 B

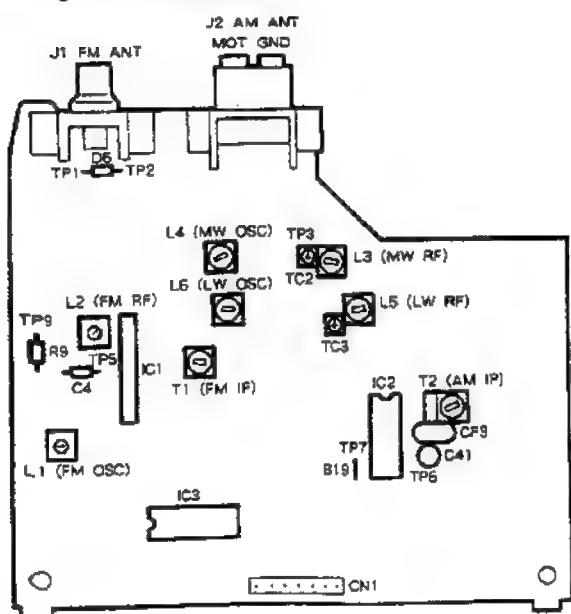


Fig. 8-4

Tuner P.C. board :UX - A4 E/G/GI/EN

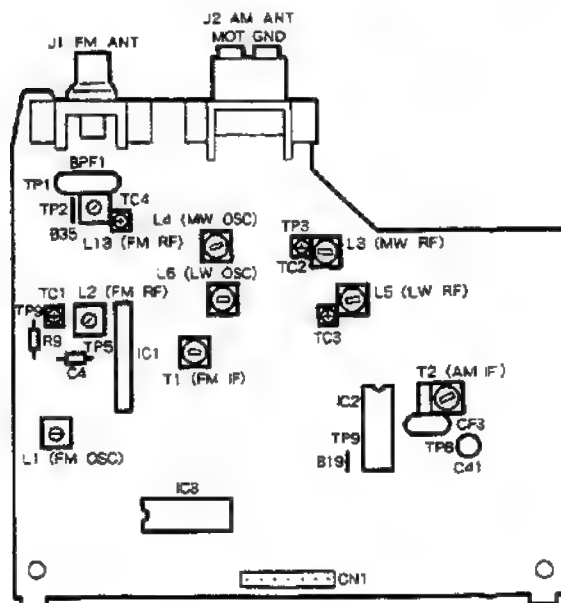


Fig. 8-5

8. Main Adjustments

■ Test Instruments required for adjustment

1. Low frequency oscillator
(oscillation frequency: 50Hz to 20kHz)
(Output : 0 dBs with 60 Ω terminator)
2. Attenuator(Impedance : 600 Ω)
3. Test Tapes
VTT712 For tape speed,wow and flutter measurement
VTT724For 3kHz reference level check
VTT736For playback frequency response check
VTT752For playback channel check(1kHz)
4. Electronic voltmeter, Distortion meter
5. Resistor...600 Ω for attenuator matching
6. Torque gauge..... Cassette type for CTG - N mechanism adjustment
7. Wow and Flutter meter , Frequency counter
8. Extension cord for check EXTUXT1 - KIT

■ Measuring conditions (Amplifier section)

Supply voltage AC 230V(50/60Hz);UX - A4 E/G/GI/EN
AC240V(50/60Hz);UX - A4B)

Reference output : Speaker 0 dBs (0.775V) / 4 Ω
: Headphone ...0 dBs (0.775V)/ 32 Ω

● Standard position of functionswitches

Function switch TAPE
Tape select switchNORMAL
Timer , DOLBY NR , Active hyper bassswitch.....OFF
Beat cut switch Position 1 or Normal

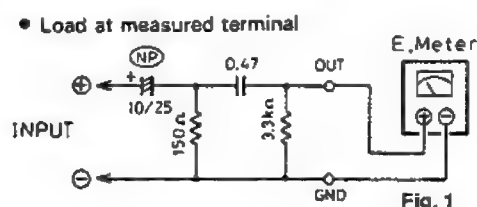
● Standard position of volume control

BASS, TREBLE CENTER
Main volume adjust 0 dBs output
Test tape for REC/PB Normal tape : UR8
Standard test frequency.....1 kHz
; unless otherwise specified.
Reference input level..... AUX IN : - 8dBs
Input for REC/PB, Check &measuringAUX IN
: - 28.0 dBs
Output for measuring unless otherwise specified

: At speaker terminal

● Test remarks

1. Negative side of the input and output on the testing set, that ought to be separately to each other, and then bear in mind there connection the testing set with 2 channeles Electronic voltmeter, the negative side never connect commonly.
2. Replaced output load with a dummy and that lead wire to be used as big as possible.
3. Attach top cover when measuring and connect filter shown below Fig. 1 to V. meter.



■ Measuring condition (Radio section)

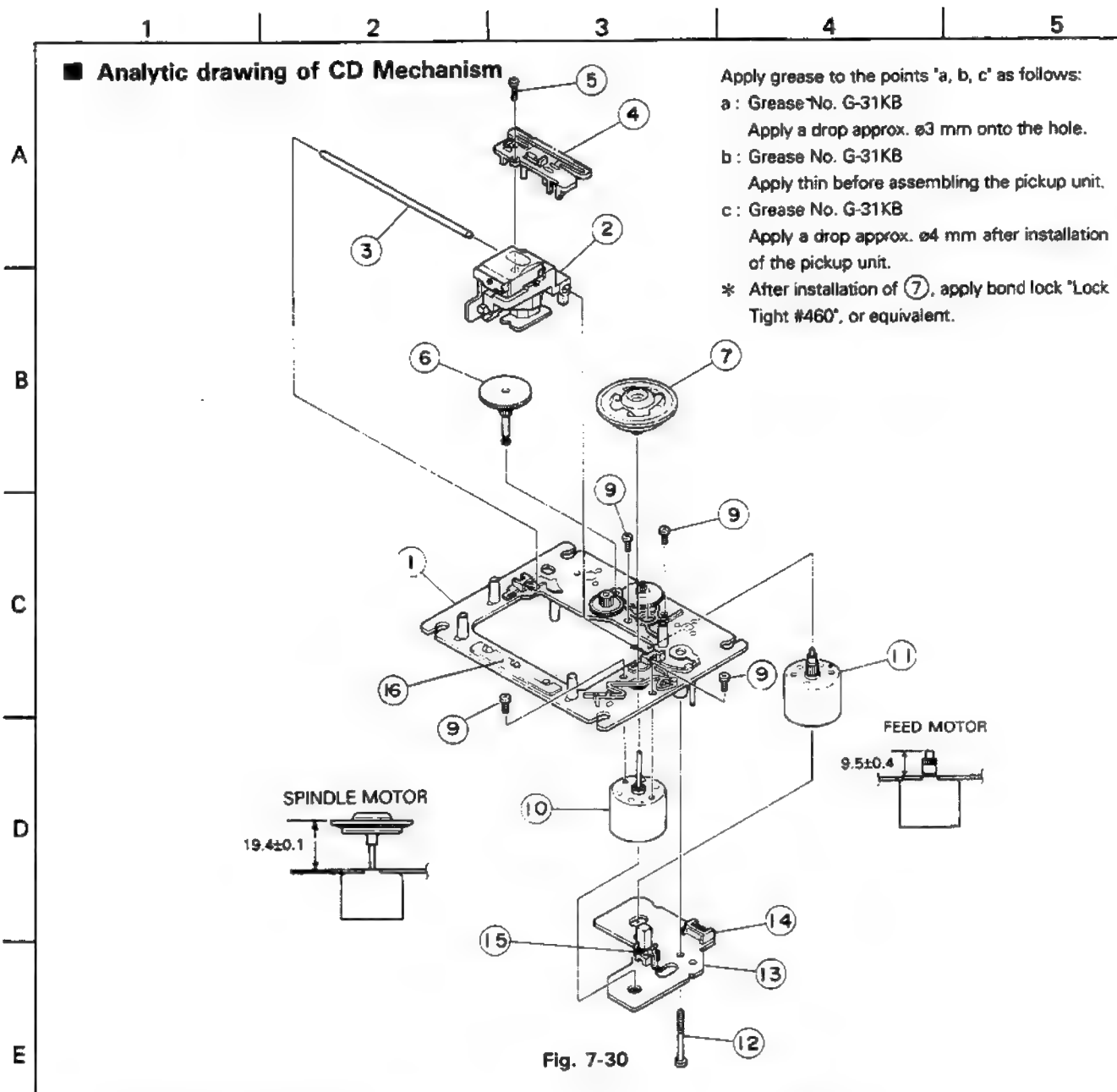
Refer to rating sourceTuner+B : DC 5.8V
Reference outputSpeaker : 50mW(0.45 V) / 4 Ω
Headphon : (0.06V)/ 32 Ω
AM frequency400Hz modulation 30%
FM frequency400Hz modulation
frequency deviation 22.5kHz

● Standard position of switches and controllers

Function.....RADIO
Mode STEREO
Super bass OFF

● Careful points for adjustment

1. Connect 30 pF capacitor and 33 k Ω resistor to the output side of the IF sweeper in series while 0.082 μ F capacitor and 100k Ω resistor to the input side in series.
- 2.Set output level of the IF sweeper as minimum as adjustable.
3. RF Alignment order
Procedure of the steps of tracking should be kept.



■ **CD Mechanism Parts List**

BLOCK NO. **M2MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	C. R
1	EPB-002A	MECHA BASE ASSY		1		
2	OPTIMA-6S	OPTICAL PICK-UP		1		
3	E406777-001	GUIDE SHAFT		1		
4	E307746-001	CD RACK		1		
5	SDSF2006Z	SCREW		1		
6	EPB-003A	MECHA GEAR		1		
7	E75807-301	TURN TABLE		1		
8	SDSP2003N	SCREW		1		
10	E406783-001	DC MOTOR	SPINDLE	1		
11	E406784-001SA	DC MOTOR ASSY	FEED	1		
12	E75832-001	SPECIAL SCREW		1		
13	EMW10190-001	PRINTED BOARD		1		
14	EMV5109-006B	CONN.TERMINAL		1		
15	ESB1100-005	LEAF SWITCH		1		
16	E407212-001	DAMPER		1		

■ Reel and Actuator motor assembly (Fig. 7-27, 7-28)

1. Remove four screws (23, 26) retaining the reel motor (21) and the actuator motor assembly (24). (Fig. 7-27)
2. When removing the reel motor, unsolder the two points (D) on the back side. (Fig. 7-28)
3. When removing the actuator motor, unsolder the two points (E) in the same manner. (Fig. 7-28)

■ Leaf switch board (Fig. 7-29)

1. Remove a screw (39) retaining the leaf switch board from the chassis basis.
2. Expand five pawls (F to J) retaining the leaf switch board in the direction of the arrow while removing the leaf switch board.

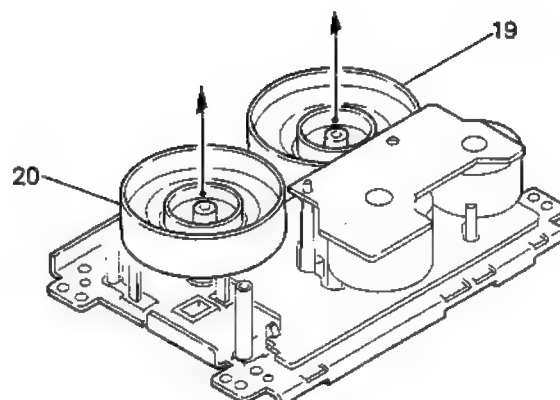


Fig. 7-25

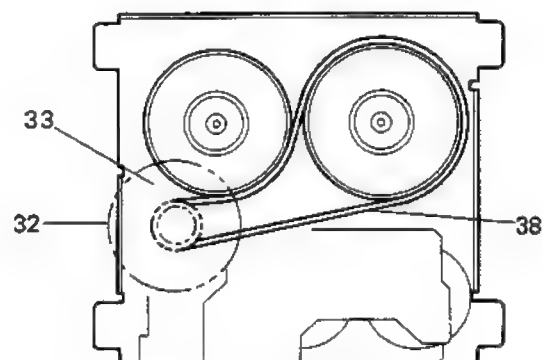


Fig. 7-26

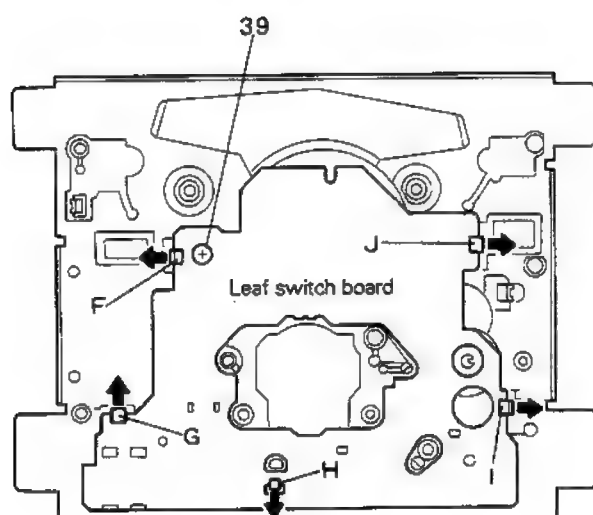


Fig. 7-29

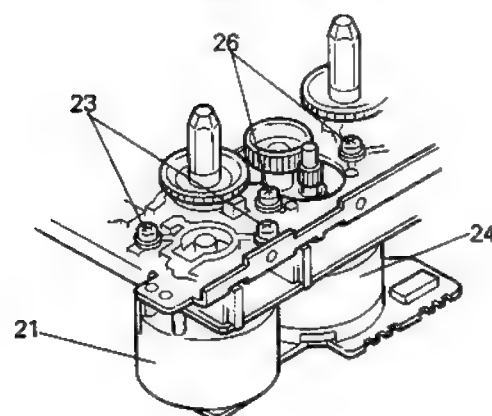


Fig. 7-27

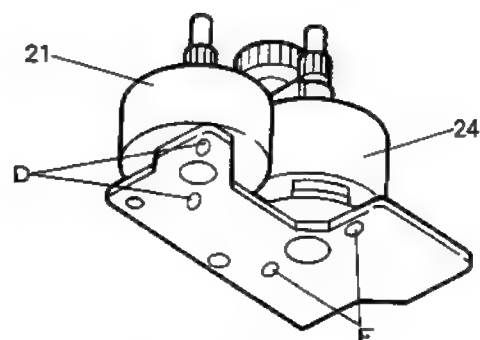


Fig. 7-28

■ Head mount assembly (A) (Fig. 7-20, 7-21)

Remove three screws (13) retaining the head mount assembly (A) from the chassis base assembly.

Note: After replacing the head mount assembly, make sure to adjust the azimuth screw (46).

■ Pinch roller assembly (Fig. 7-22)

1. Expand the pawl (A) retaining the pinch roller assembly (27) on the right side in the direction of the arrow while pulling out the pinch roller assembly upwards.
2. In the same manner as above, expand the pawl retaining the pinch roller assembly (28) on the left side to remove the left pinch roller assembly. (Fig. 7-20, too)

■ Capstan motor and Flywheel (Fig. 7-24 through 7-26)

1. Place the cassette mechanism upside down to expose the bottom. (Fig. 7-24)
2. Remove three screws (37) retaining the FR bracket assembly from the chassis base. (Fig. 7-24)
3. Expand two pawls (B, C) retaining the FR bracket assembly in the direction of the arrow to remove them. (Fig. 7-24)
4. Remove the FR bracket assembly.
5. Remove two screws (34) retaining the capstan motor (32) from the FR bracket assembly. (Fig. 7-23)
6. Disengage the belt (38) and pull out the flywheels (19, 20). (Fig. 7-25, 7-26)

Note: When disengaging the belt, carefully do it not to stain it with oil, etc.

For reengaging the belt, refer to Fig. 7-26.

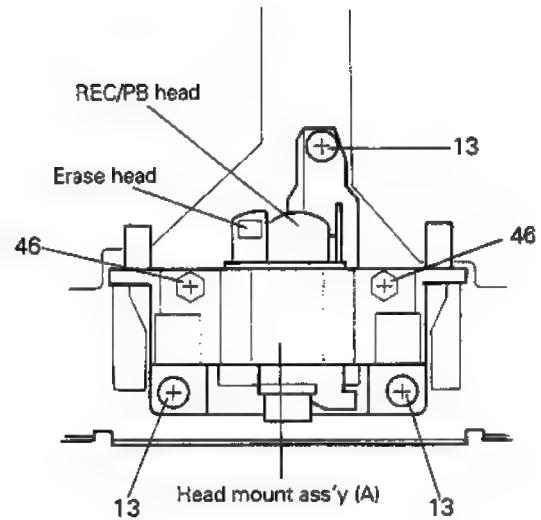


Fig. 7-21

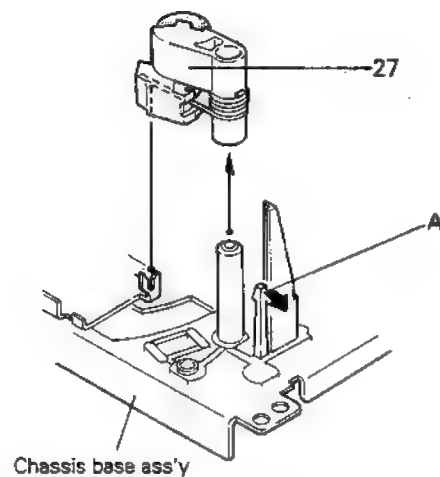


Fig. 7-22

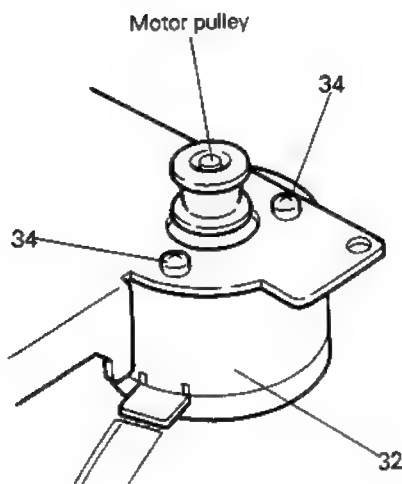


Fig. 7-24

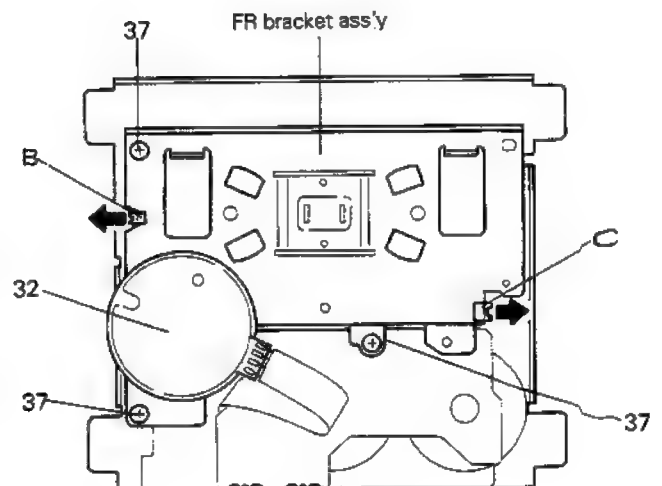
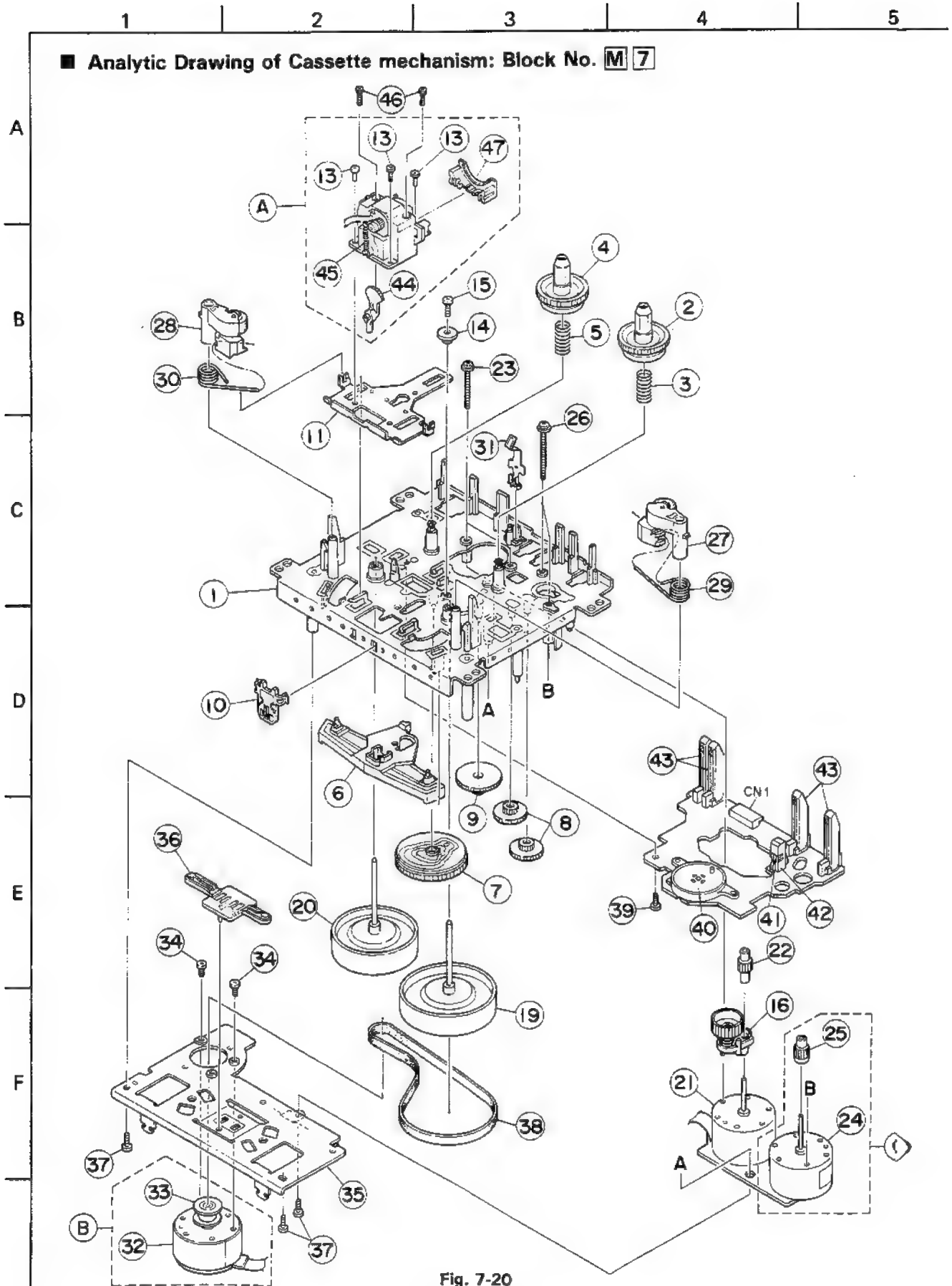


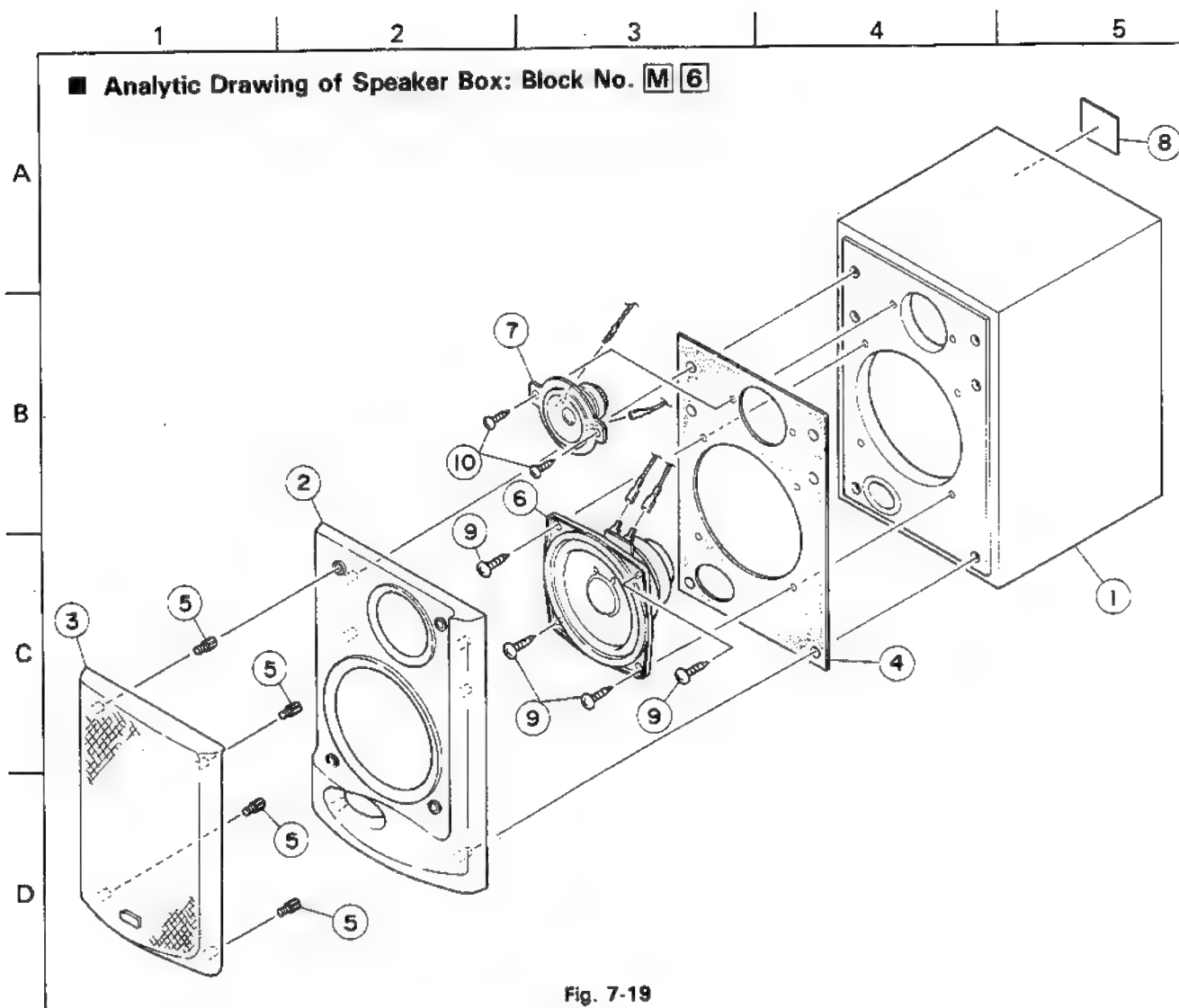
Fig. 7-23

■ Cassette Mechanism Parts List

BLOCK NO. 4200111

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	VKS3629-00B	HEAD BLOCK	REF.13,45,47	1		
	B	MSI5B2LW-SA1	CAPSTAN MOTOR	REF.32,33	1		
	C	MSN5D257A-SA1	DC MOTOR	REF.24,25	1		
	1	VKS1126-00B	CHASSIS B ASS'Y		1		
	2	VKS5428-00B	T-UP REEL ASSY		1		
	3	VKW5043-001	B.T. SPRING		1		
	4	VKS3617-002	REEL		1		
	5	VKW5043-001	B.T. SPRING		1		
	6	VKS3627-001	PINCH LEVER		1		
	7	VKS2224-001	CONTROL CAM		1		
	8	VKS5454-001	ACT GEAR(2)		2		
	9	VKS5455-001	ACT GEAR(3)		1		
	10	VKS3655-002	F.P.C. HOLDER		1		
	11	VKM3632-001	HEAD BASE	PRESS KIT S	1		
	13	SDST2004Z	SCREW		3		
	14	VKZ4708-001	SPECIAL SCREW		1		
	16	VKS5430-00B	FR ARM ASY		1		
	19	VKF3184-00H	FLYWHEEL(R)ASY		1		
	20	VKF3186-00H	FLYWHEEL(L)ASY		1		
	21	MMN-6F4RA38	D.C.MOTOR	FOR REEL,MOTOR	1		
	22	VKS5432-001	REEL MOT. GEAR	GEAR KIT S	1		
	23	VKZ4705-001	SPECIAL SCREW		2		
	24	MSN-5D257A	D.C.MOTOR	FOR ACT,MOTOR K	1		
	25	VKS5433-001	ACT.MOTOR GEAR	GEAR KIT S	1		
	26	VKZ4705-002	SPECIAL SCREW		2		
	27	VKP4227-00B	PINCH R.(R) ASY		1		
	28	VKP4229-00B	PINCH R.(L) ASY		1		
	29	VKW5045-003	P.R. SP.(R)	FOR PINCH (R)	1		
	30	VKW5046-003	P.R. SP.(L)	FOR PINCH (L)	1		
	31	VKY4670-001	CASSETTE SPRING	PRESS KIT S	1		
	32	MSI-5B2LW	D.C.MOTOR	FOR CAP,MOTOR K	1		
	33	VKR4364-002	MOTOR PULLEY		1		
	34	SPSP2603Z	SCREW		2		
	35	VKM3636-002	FM. BRACKET	PRESS KIT S	1		
	36	VKS5327-004	THRUST PLATE		1		
	37	SDSF2608Z	SCREW		3		
	38	VKB3001-051	BELT		1		
	39	SDST2612Z	SCREW		1		
	40	VKS3616-00A	CAM SW UNIT		1		
	41	DN6851-HI	HALL IC		1		
	42	VKS3630-001	IC HOLDER		1		
	43	VSH1170-001	CASSETTE SWITCH		4		
	44	VKS3614-001	TURN OVER GEAR		1		
	45	VKW5063-003	HEAD SPRING		1		
	46	VKZ4629-003	SPECIAL SCREW		2		
	47	VKS3654-001	HEAD MT. COVER		1		





BLOCK NO. M 6

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	DH505-LUX-A4	SPEAKER BOX ASY	LEFT	1		
	DH505-RUX-A4	SPEAKER BOX ASY	RIGHT	1		
2	DH401-LUX-A4	FRONT PANEL	LEFT	1		
	DH401-RUX-A4	FRONT PANEL	RIGHT	1		
3	DH903-LUX-A4	SPEAKER NET	LEFT	1		
	DH903-RUX-A4	SPEAKER NET	RIGHT	1		
4	DH429-1UX-A4	RUBBER PACKING		1		
5	DH429-UX-A4	INSERT NUT		4		
6	VGS1201-008	SPEAKER	12CM	1		
7	VGS0501-004	SPEAKER	5CM	1		
8	DH610-UX-A4	NAME PLATE		1		
9	SDSA4014M	SCREW	12CM SPEAKER	4		
10	SDSA4012M	SCREW	5CM SPEAKER	2		

CD Amplifier P.C. Board: Drawing No. VMW1308, Block No. 0 8

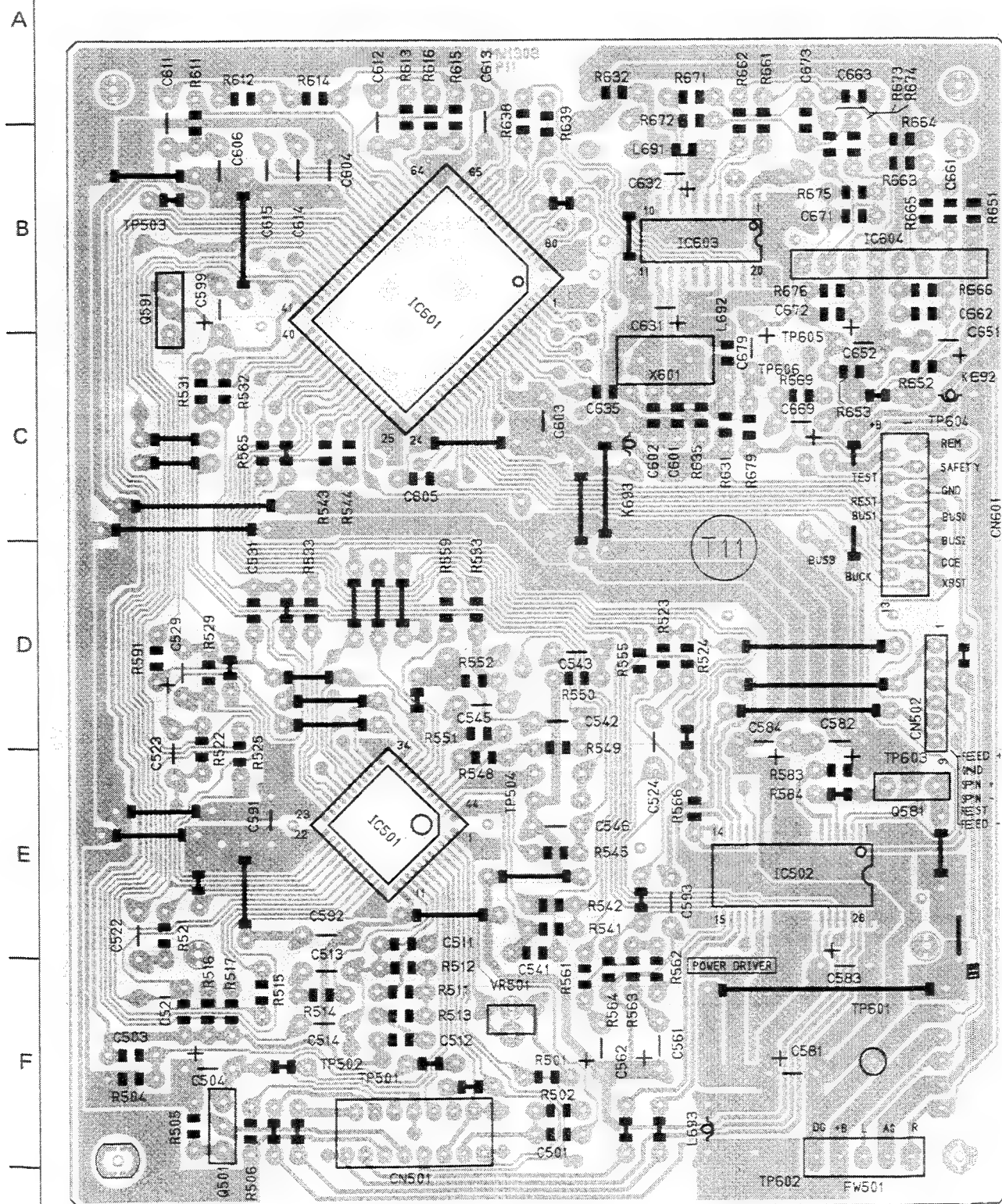


Fig. 12-8

■ Operation Key Switch P.C. Board: Drawing No. VMW2375, Block No. 0 7

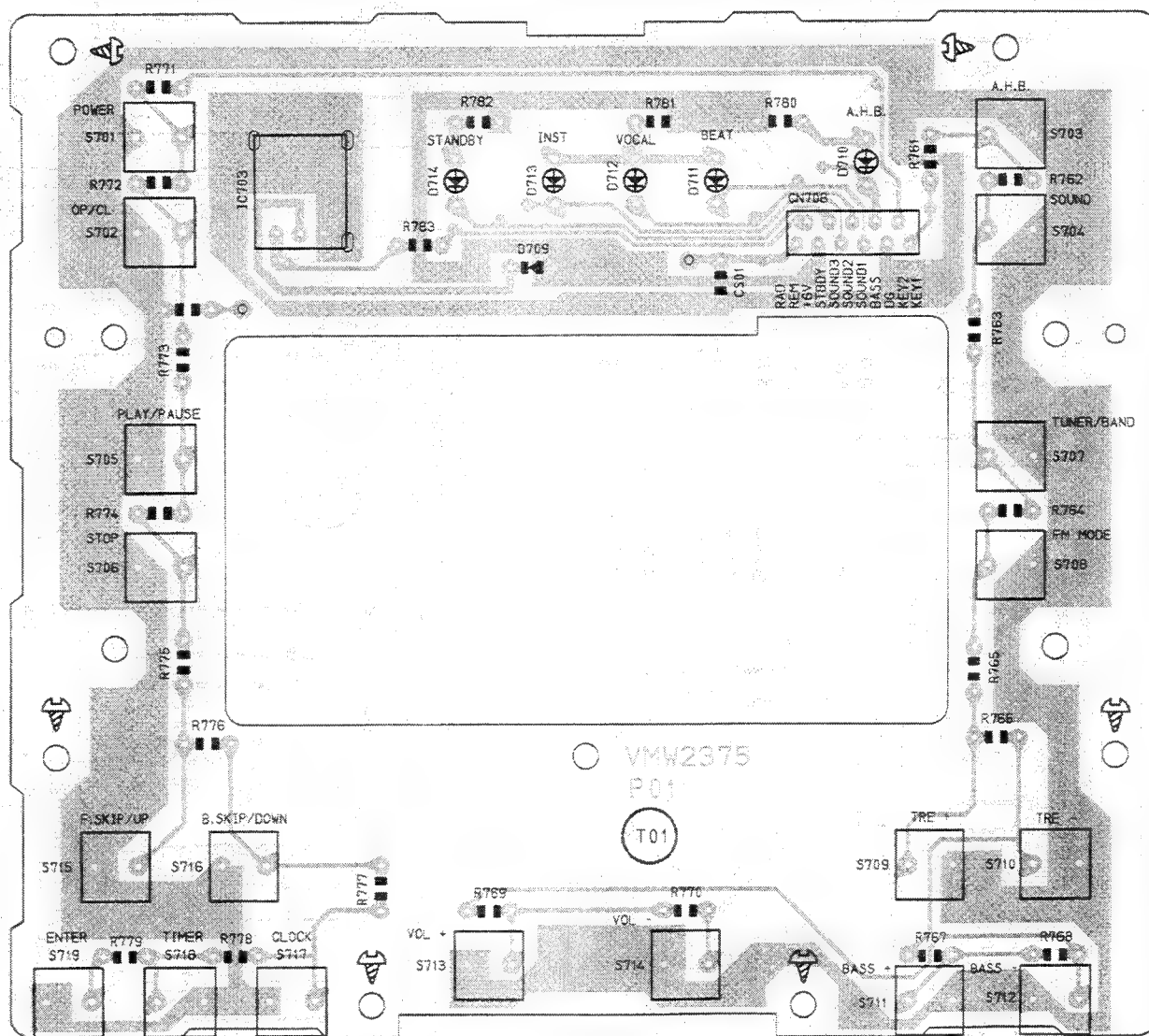


Fig. 12-9

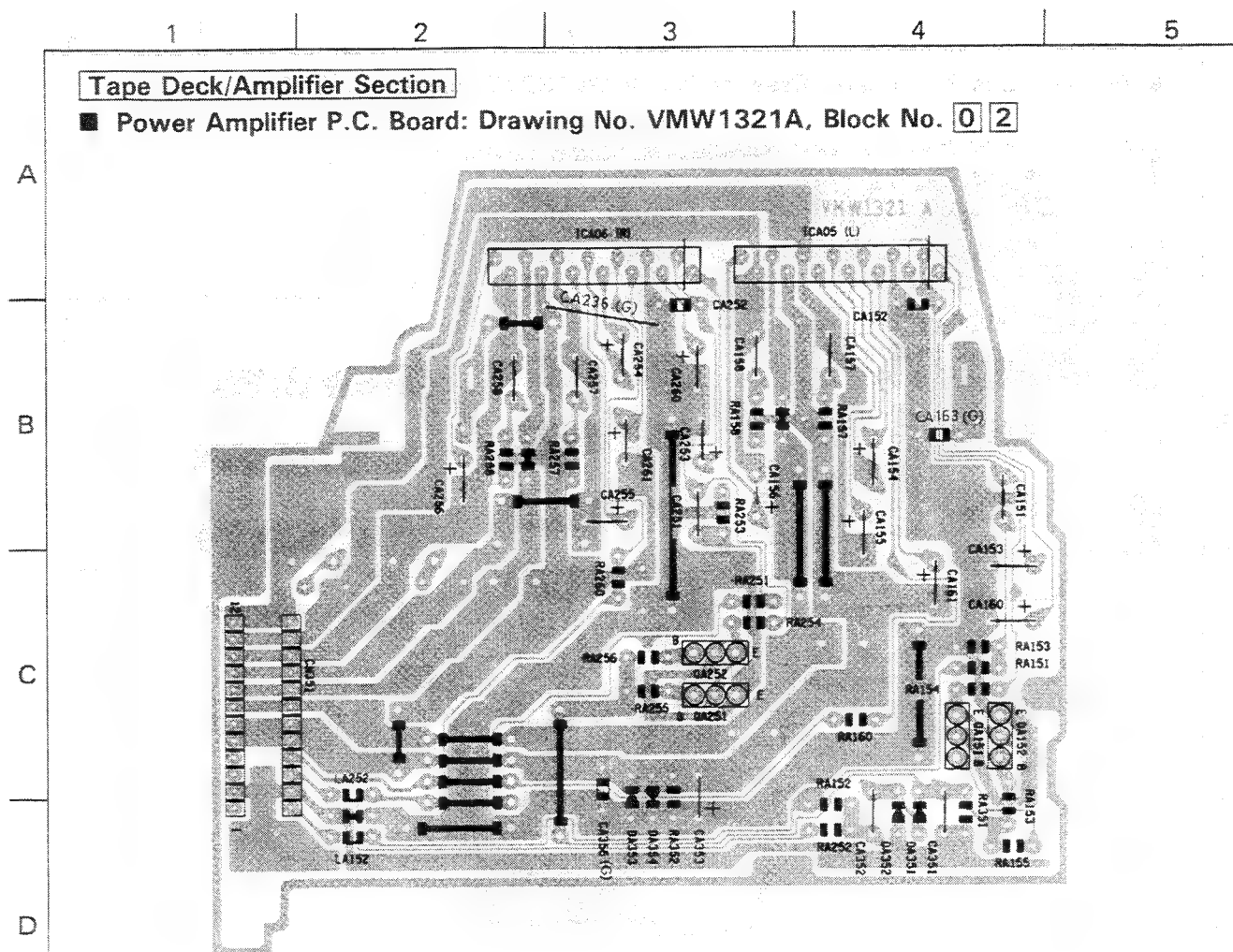


Fig. 12-10

■ Fuse P.C. Board: Drawing No. VMW1321B, Block No. 0 1

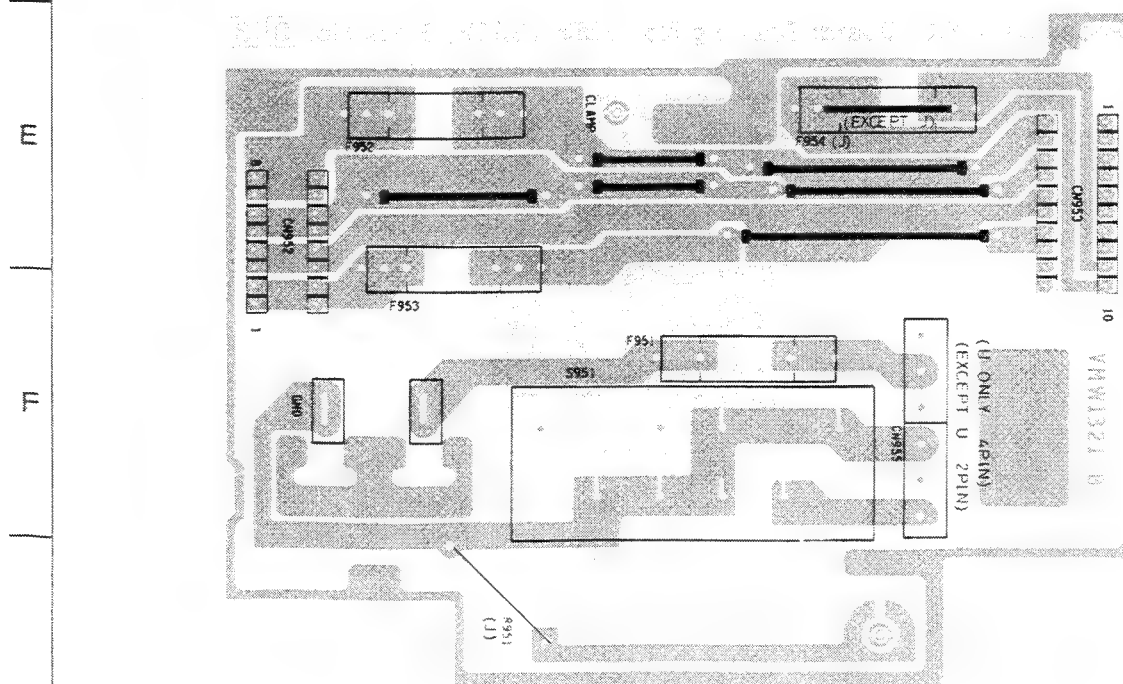


Fig. 12-11

■ Power Trans P.C. Board: Drawing No. VMW1321C, Block No. **01**

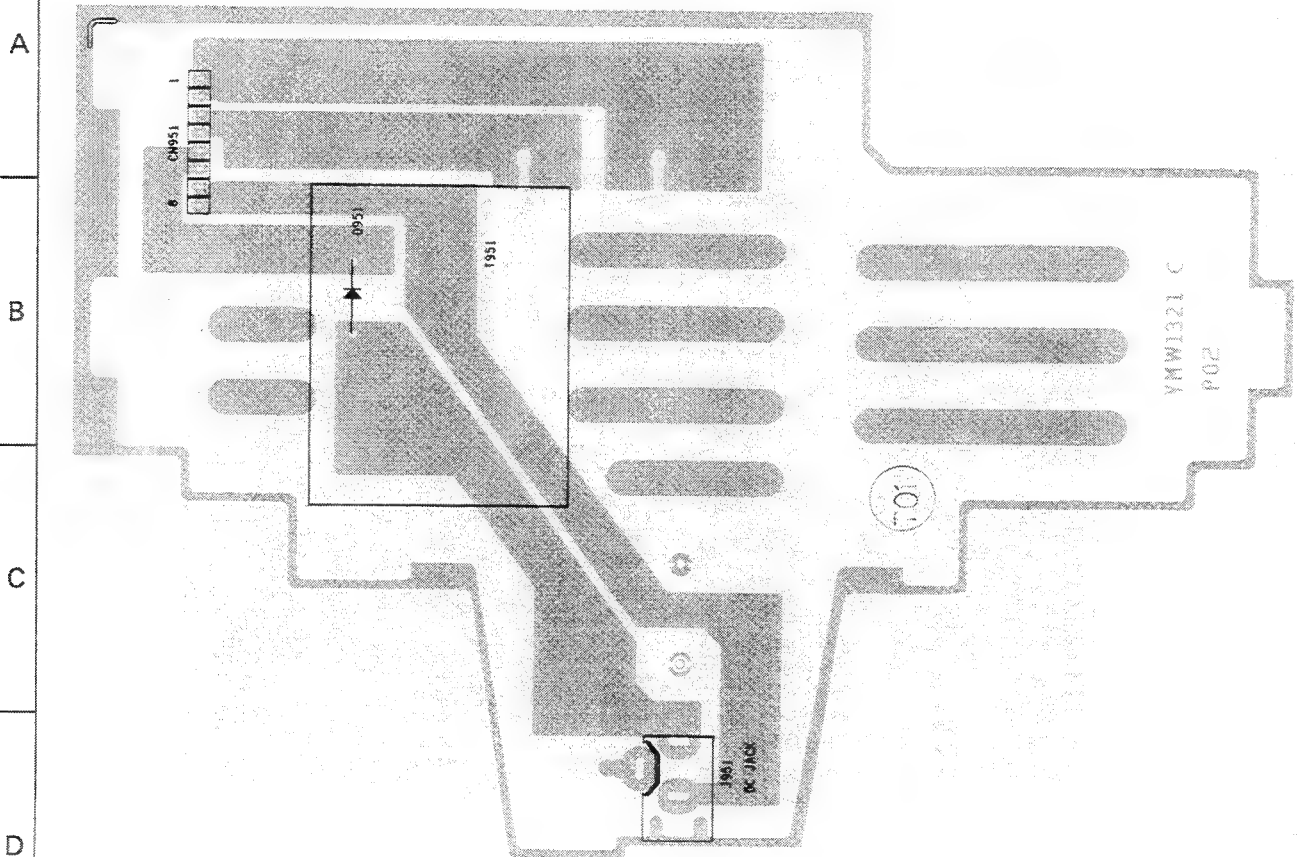


Fig. 12-12

■ Head Phone Jack P.C. Board: Drawing No. VMW1321H, Block No. **03**

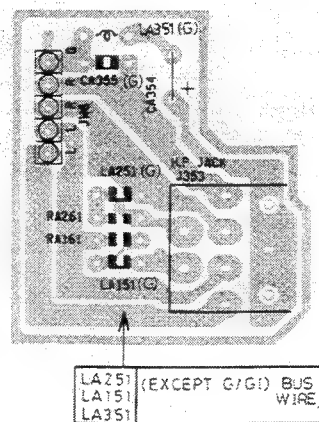


Fig. 12-13

■ Recording Amplifier P.C. Board: Drawing No. VMW1321F, Block No. **0 4**

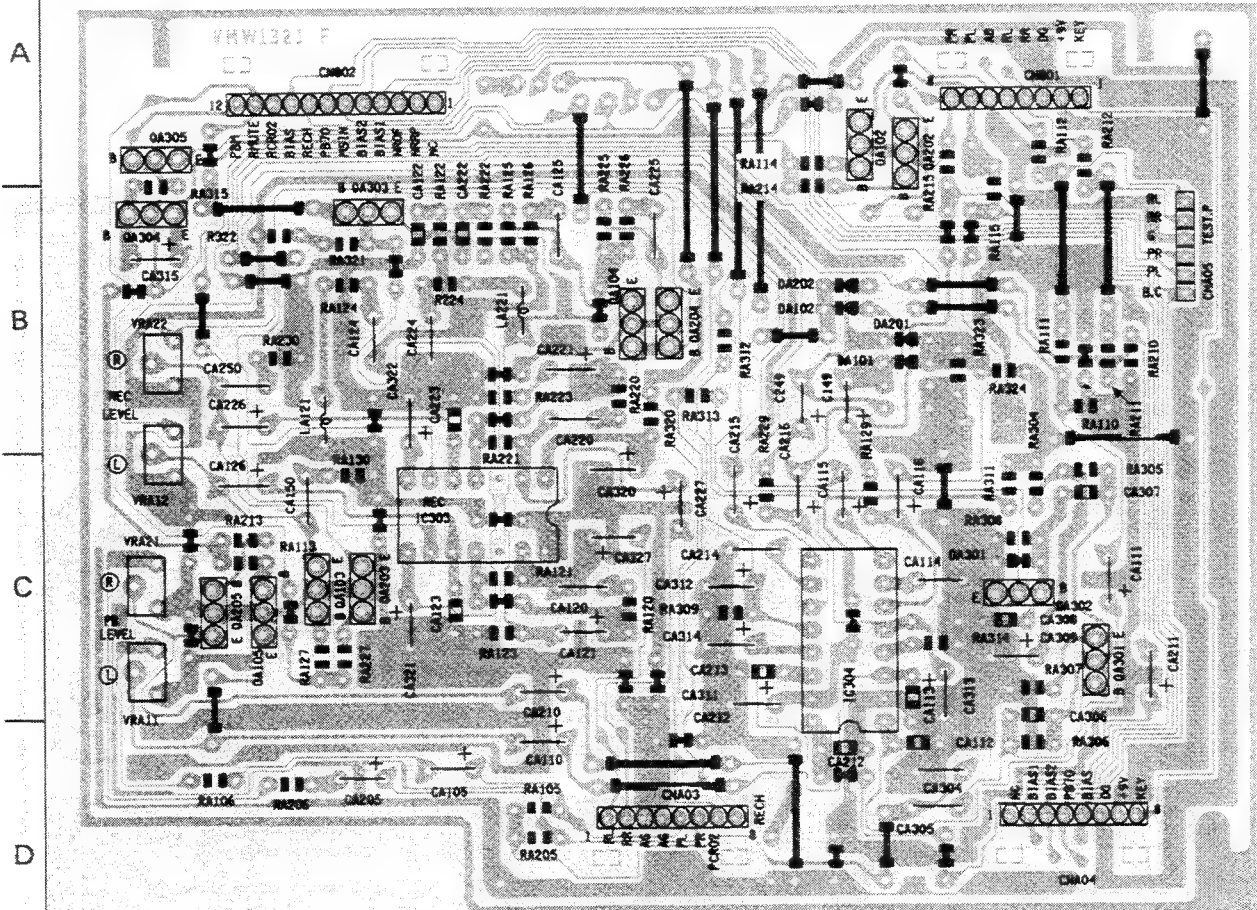


Fig. 12-14

■ Operation Key Switch P.C. Board: Drawing No. VMW1321G, Block No. **0 4**

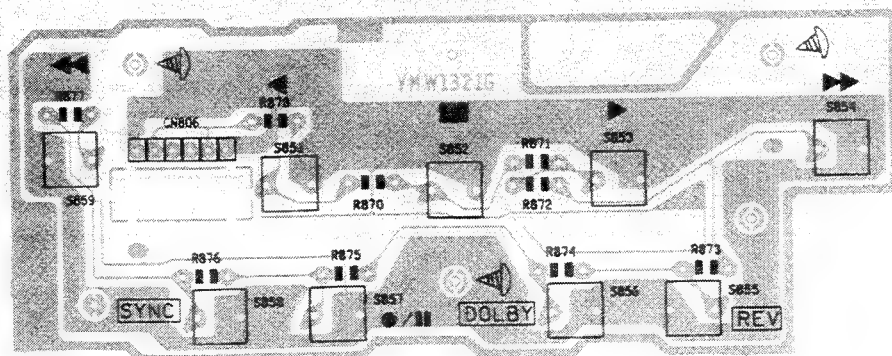


Fig. 12-15

■ Mechanism Control P.C. Board: Drawing No. VMW1321D, Block No. 0 4

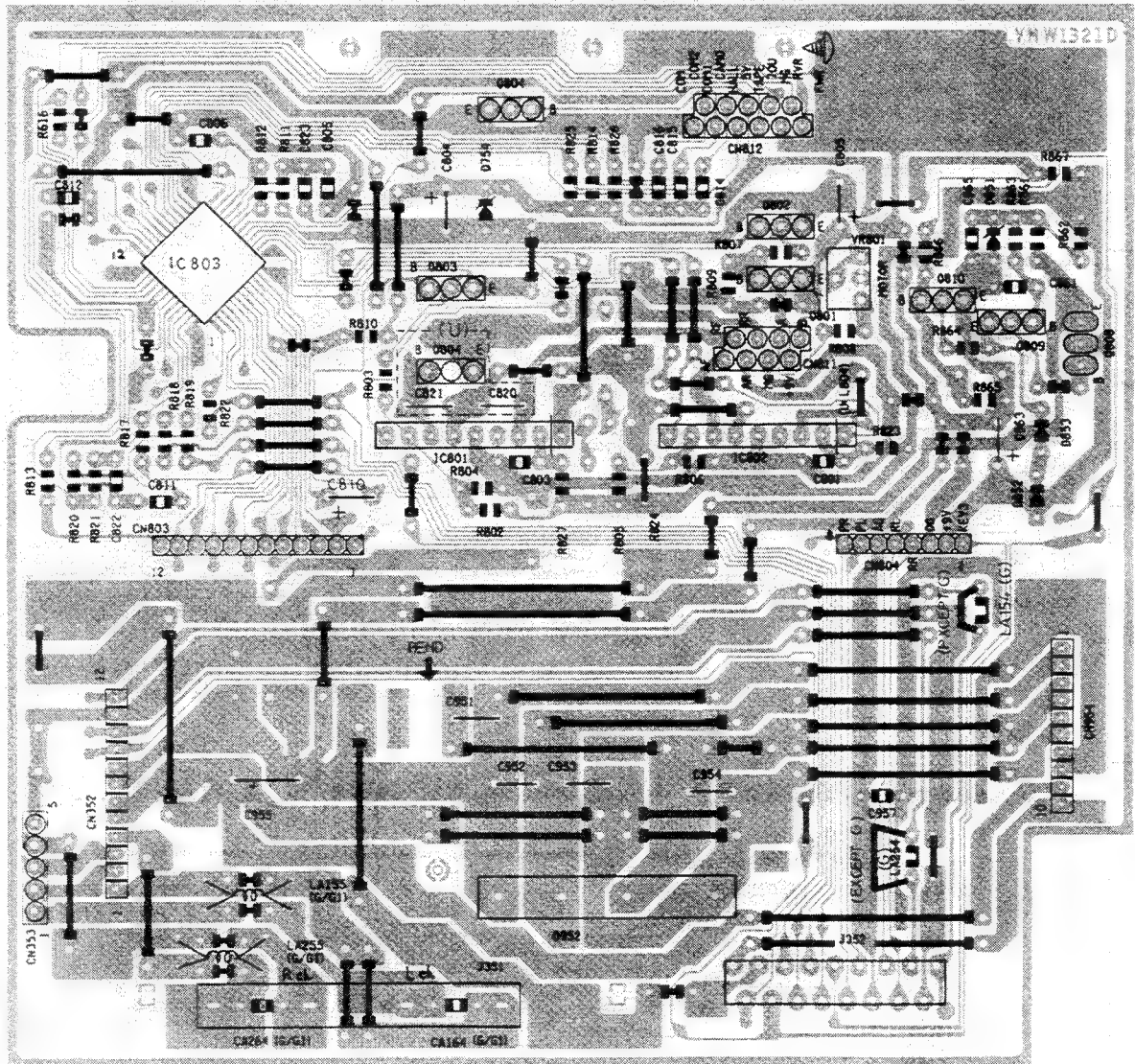


Fig. 12-16

BLOCK NO. 04

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RA106	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA110	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RA111	QRD161J-303Y	CARBON RESISTOR	30K 5% 1/6W	
RA112	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
RA113	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA114	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA115	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA120	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA121	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA122	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RA123	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RA124	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
RA125	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RA126	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RA127	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA128	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA129	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA130	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
RA201	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
RA202	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
RA203	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RA204	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RA205	QRD161J-122	CARBON RESISTOR	MS IN	
RA206	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA210	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RA211	QRD161J-303Y	CARBON RESISTOR	30K 5% 1/6W	
RA212	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
RA213	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA214	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA215	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA220	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA221	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RA222	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RA223	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RA224	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
RA225	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RA226	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RA227	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA228	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA229	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RA230	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
RA301	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RA302	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA303	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RA304	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
RA305	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RA306	QRD161J-225	CARBON RESISTOR	2.2M 5% 1/6W	
RA307	QRD167J-121	CARBON RESISTOR	120 5% 1/6W	
RA308	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RA311	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RA312	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA313	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RA314	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RA315	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RA320	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	

BLOCK NO. 04

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
QA312	2SD1302(S,T)	TRANSISTOR		
QA313	2SD1302(S,T)	TRANSISTOR		
R 802	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 803	QRD161J-432	CARBON RESISTOR	4.3K 5% 1/6W	
R 804	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
R 805	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 806	QRD161J-203	CARBON RESISTOR	20K 5% 1/6W	
R 807	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 808	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 809	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 810	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 811	QRD161J-484	CARBON RESISTOR	680K 5% 1/6W	
R 812	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 813	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 814	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 816	QRD161J-373	CARBON RESISTOR	27K 5% 1/6W	
R 817	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 818	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 819	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 820	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R 821	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R 822	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 823	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
R 825	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 826	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 827	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
R 831	QRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W	
R 832	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 833	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 834	QRD161J-383	CARBON RESISTOR	3.3 5% 1/6W	
R 835	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 836	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 837	QRD14CJ-101SX	UF RESISTOR	100 5% 1/4W	
R 838	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
R 841	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R 842	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 843	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 844	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 845	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 846	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 867	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 870	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 871	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 872	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 873	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 874	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 875	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 876	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 877	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 878	QRD161J-202	CARBON RESISTOR	2.0K 5% 1/6W	
RA101	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
RA102	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
RA103	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RA104	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RA105	QRD161J-122	CARBON RESISTOR	MS IN	

• LCD/Micro Computer P.C. Board

BLOCK NO. 04					BLOCK NO. 05				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RA321	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W		C 701	QCS11HJ-270	C. CAPACITOR	27PF 5% 50V	
RA322	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W		C 702	QCS11HJ-330	C. CAPACITOR	33PF 5% 50V	
RA323	QRD161J-101	CARBON RESISTOR	100 5% 1/6W		C 703	QCS11HJ-470	C. CAPACITOR	47PF 5% 50V	
RA324	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		C 704	QCS11HJ-560	C. CAPACITOR	56PF 5% 50V	
RA340	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W		C 705	QCS11HJ-330	C. CAPACITOR	33PF 5% 50V	
RA341	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W		C 706	QCS11HJ-330	C. CAPACITOR	33PF 5% 50V	
RA342	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W		C 707	QCB11HK-472Y	C. CAPACITOR	4700PF 20% 16V	
RA343	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W		C 708	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 851	QSG1A11-V04Z	TACT SW	REV		C 709	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 852	QSG1A11-V04Z	TACT SW	REV		C 710	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 853	QSG1A11-V04Z	TACT SW	STOP		C 711	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 854	QSG1A11-V04Z	TACT SW	FWD		C 712	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 855	QSG1A11-V04Z	TACT SW	FF		C 713	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 856	QSG1A11-V04Z	TACT SW	REV. MODE		C 714	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 857	QSG1A11-V04Z	TACT SW	DOLBY		C 715	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
S 858	QSG1A11-V04Z	TACT SW	REC		C 730	QCB11HK-102Y	C. CAPACITOR	10MF 20% 16V	
S 859	QSG1A11-V04Z	TACT SW	SYNCHRO		C 731	QCB11HK-102Y	C. CAPACITOR	1.0MF 20% 50V	
VRA11	QUPA603-502AZM	SEMI.V. RESISTOR	PB LEVEL		C 732	QCB11HK-102Y	C. CAPACITOR	10MF 20% 10V	
VRA12	QUPA603-502AZM	SEMI.V. RESISTOR	REC LEVEL		C 733	QCB11HK-102Y	C. CAPACITOR	10MF 20% 16V	
VRA13	QUPA603-503A	V RESISTOR	BIAS LEVEL		C 734	QCB11HK-102Y	C. CAPACITOR	10MF 20% 16V	
VRA21	QUPA603-502AZM	SEMI.V. RESISTOR	PB LEVEL		C 735	QCB11HK-102Y	C. CAPACITOR	10MF 20% 16V	
VRA22	QUPA603-502AZM	SEMI.V. RESISTOR	REC LEVEL		C 736	QCB11HK-102Y	C. CAPACITOR	10MF 20% 16V	
VRA23	QUPA603-503A	V RESISTOR	BIAS LEVEL		C 740	VCE0056-479Z	SUPER CAP.	1000PF 10% 50V	
VR801	QVZ3523-103AZ	V RESISTOR	TAPE SPEED ADJ.		C 741	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
					C 742	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
					C 743	QCB11HK-102Y	C. CAPACITOR	1000PF 10% 50V	
					CN701	VMC0163-011	CONNECTOR	FOR KEY	
					CN702	VMC0163-R13	CONNECTOR	FOR FUNC.1	
					CN703	VMC0163-R13	CONNECTOR	FOR FUNC.2	
					CN704	VMC0041-006	CONNECTOR	FOR CD DOOR	
					CN705	VMC0107-R05	SOCKET	FOR CD	
					CN706	VMC0163-009	CONNECTOR	FOR CD BUS	
					CS701	QCB11HK-106ZN	E CAPACITOR	10MF 20% 16V	
					CS702	QCB11HK-103Y	C CAPACITOR	-010MF 20% 16V	
					D 701	1SS133	SI DIODE		
					D 708	1SS133	SI DIODE		
					D 715	MT25-1JB	Z-DIODE		
					D 716	1SS133	SI DIODE		
					D 717	1SS133	SI DIODE		
					DS701	MA700	ZENER DIODE		
					DS702	MT25-1JC	Z DIODE		
					ICM01	MN171603JJB	IC	UCOM(CTL)	
					IC701	MN171603JJB	IC	UCOM(CTL)	
					IC702	BA6208A	IC	CD DOOR	
					L 701	VQZ0048-009	INDUCTOR		
					L 702	VQZ0018-487	INDUCTOR		
					L 708	VQZ0028-1002	INDUCTOR		
					PL 01	VGZ0001-057	P-LAMP	BACK LIGHT	
					PL 02	VGZ0001-057	P-LAMP		
					Q 701	2SC2668(0)	TRANSISTOR		
					Q 702	2SC2668(0)	TRANSISTOR		
					Q 703	2SC2668(0)	TRANSISTOR		
					Q 704	2SA1175	TRANSISTOR		
					Q 711	DTC124ES	TRANSISTOR		
					Q 712	2SC2785(HFE)	TRANSISTOR		

BLOCK NO. 05					BLOCK NO. 05					
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 713	DTC124ES	TRANSISTOR				R 752	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
Q 714	DTC124ES	TRANSISTOR				R 753	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
Q 715	DTC124ES	TRANSISTOR				R 754	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
Q 716	DTC124ES	TRANSISTOR				R 755	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
Q 717	DTC124ES	TRANSISTOR				R 756	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
Q 718	DTC124ES	TRANSISTOR				R 757	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
Q 719	DTC124ES	TRANSISTOR				R 758	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
Q 720	DTC124ES	TRANSISTOR				R 759	QRD167J-4R7	CARBON RESISTOR	4.7 5% 1/6W	
Q 721	DTC124ES	TRANSISTOR				R 760	QRD161J-333	CARBON RESISTOR	180 5% 1/6W	
Q 722	DTC124ES	TRANSISTOR				R 761	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
Q 723	DTC124ES	TRANSISTOR				R 762	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
Q 724	DTC124ES	TRANSISTOR				R 763	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
Q 725	DTC124ES	TRANSISTOR				R 764	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
Q 726	DTC124ES	TRANSISTOR				R 765	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
Q 727	DTC124ES	TRANSISTOR				R 766	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
Q 728	DTC124ES	TRANSISTOR				R 767	QRD161J-222	CARBON RESISTOR	27K 5% 1/6W	
Q 729	DTC124ES	TRANSISTOR				R 768	QRD161J-222	CARBON RESISTOR	68K 5% 1/6W	
Q 730	DTC124ES	TRANSISTOR				R 769	QRD161J-683	CARBON RESISTOR	10K 5% 1/6W	
Q 731	DTC124ES	TRANSISTOR				R 770	QRD161J-103	CARBON RESISTOR	2.2K 5% 1/6W	
Q 732	DTC124ES	TRANSISTOR				R 771	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
Q 733	DTC124ES	TRANSISTOR				R 772	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
Q 734	DTC124ES	TRANSISTOR				R 773	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
Q 735	DTC124ES	TRANSISTOR				R 774	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
Q 736	DTC124ES	TRANSISTOR				R 775	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
Q 737	DTC124ES	TRANSISTOR				R 776	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
Q 738	DTC124ES	TRANSISTOR				R 777	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
Q 739	DTC124ES	TRANSISTOR				R 778	VCX5000-001	CRYSTAL		
Q 740	DTC124ES	TRANSISTOR				R 779	CSA4.19MG933	CERA LOCK		
Q 741	DTC124ES	TRANSISTOR								
Q 742	DTC124ES	TRANSISTOR								
Q 743	DTC124ES	TRANSISTOR								
Q 744	DTC124ES	TRANSISTOR								
Q 745	DTC124ES	TRANSISTOR								
Q 746	DTC124ES	TRANSISTOR								
Q 747	DTC124ES	TRANSISTOR								
Q 748	DTC124ES	TRANSISTOR								
Q 749	DTC124ES	TRANSISTOR								
Q 750	DTC124ES	TRANSISTOR								
Q 751	DTC124ES	TRANSISTOR								
Q 752	DTC124ES	TRANSISTOR								

• Function P.C. Board

BLOCK NO. 03				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CF 01	QEK41EM-475	E. CAPACITOR	4.7MF 20X 25V	
CF 02	QEK41CM-476	E. CAPACITOR	47MF 20X 16V	
CF 03	QEK41CM-336	E. CAPACITOR	33MF 20X 16V	
CF 04	QEK41CM-476	E. CAPACITOR	E. VOL	
CF 05	QEK41CM-476	E. CAPACITOR	E. VOL	
CF 06	QEK41CM-476	E. CAPACITOR	47MF 20X 16V	
CF 07	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF 08	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF 09	QCVB1CM-103Y	C. CAPACITOR	-0.10MF 20X 16V	
CF 10	QCVB1CM-103Y	C. CAPACITOR	-0.10MF 20X 16V	
CF 11	QEK61AM-107ZM	E. CAPACITOR	100MF 20X 10V	
CF 12	QEK41HM-225	E. CAPACITOR	2.2MF 20X 50V	
CF 13	QCB81HK-102Y	C. CAPACITOR	1000PF 10X 50V	
CF 14	QEK41HM-225	E. CAPACITOR	2.2MF 20X 50V	
CF 15	QEK61AM-107ZM	E. CAPACITOR	100MF 20X 10V	
CF 16	QEK41CM-476	E. CAPACITOR	47MF 20X 16V	
CF 17	QCB81HK-102Y	C. CAPACITOR	1000PF 10X 50V	
CF 18	QEK41CM-476	E. CAPACITOR	47MF 20X 16V	
CF 19	QEK41HM-105	E. CAPACITOR	VOL	
CF 20	QEK41HM-105	E. CAPACITOR	BASS	
CF 21	QEK41HM-105	E. CAPACITOR	TRE	
CF 22	QEK41CM-476	E. CAPACITOR	47MF 20X 16V	
CF 23	QCVB1CM-103Y	C. CAPACITOR	-0.10MF 20X 16V	
CF 24	QCVB1CM-103Y	C. CAPACITOR	-0.10MF 20X 16V	
CF 25	QEK41CM-476	E. CAPACITOR	47MF 20X 16V	
CF101	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF102	QEK41CM-106	E. CAPACITOR	10MF 20X 16V	
CF103	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF104	QCB81HK-151Y	C. CAPACITOR	E. VOL	
CF105	QCB81CM-472Y	C. CAPACITOR	4700PF 20X 16V	
CF106	QFV81HJ-473	TF. CAPACITOR	-0.47MF 5X 50V	
CF107	QFV11HJ-154AZM	TF. CAPACITOR	-15MF 5X 50V	
CF108	QFV41HJ-104	TF. CAPACITOR	E. VOL	
CF109	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF110	QFV11HJ-393AZM	TF. CAPACITOR	-0.39MF 5X 50V	
CF111	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF112	QCB81HK-331Y	C. CAPACITOR	330PF 10X 50V	
CF113	QEK41CM-226	E. CAPACITOR	22MF 20X 16V	
CF114	QFV11HJ-563AZM	TF. CAPACITOR	-0.56MF 5X 50V	
CF115	QFV41HJ-823	TF. CAPACITOR	-0.82MF 5X 50V	
CF116	QCB81HK-151Y	C. CAPACITOR	150PF 10X 50V	
CF117	QCS11HJ-330	C. CAPACITOR	33PF 5X 50V	
CF201	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF202	QEK41CM-106	E. CAPACITOR	10MF 20X 16V	
CF203	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF204	QCB81HK-151Y	C. CAPACITOR	E. VOL	
CF205	QCVB1CM-472Y	C. CAPACITOR	4700PF 20X 16V	
CF206	QFV81HJ-473	TF. CAPACITOR	-0.47MF 5X 50V	
CF207	QFV11HJ-154AZM	TF. CAPACITOR	-15MF 5X 50V	
CF208	QFV41HJ-104	TF. CAPACITOR	E. VOL	
CF209	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF210	QFV11HJ-393AZM	TF. CAPACITOR	-0.39MF 5X 50V	
CF211	QEK41HM-105	E. CAPACITOR	1.0MF 20X 50V	
CF212	QCB81HK-331Y	C. CAPACITOR	330PF 10X 50V	
CF213	QEK41CM-226	E. CAPACITOR	22MF 20X 16V	

BLOCK NO. 04				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CF214	QFV11HJ-563AZM	TF. CAPACITOR	-0.56MF 5X 50V	
CF215	QFV41HJ-823	TF. CAPACITOR	-0.82MF 5X 50V	
CF216	QCB81HK-151Y	C. CAPACITOR	150PF 10X 50V	
CF217	QCS11HJ-330	C. CAPACITOR	33PF 5X 50V	
CNF01	VMC0163-R13	CONNECTOR	FOR UCOM-1	
CNF02	VMC0163-R13	CONNECTOR	FOR UCOM-2	
DF 01	MA165	SI DIODE		
DF 02	MA165	SI DIODE		
DF 03	MA165	SI DIODE		
DF 04	MT25-6JA	Z. DIODE		
DF 06	MA165	SI DIODE		
DF 07	MA165	SI DIODE		
DF 08	MT28-2JC	Z. DIODE		
DF 09	MTJ6-2B	Z. DIODE		
DF 10	MA165	SI DIODE		
DF 11	MA165	SI DIODE		
ICF01	VC4580L	IC	PWM VOL	
ICF02	TA8184P	IC	LINE AMP	
ICF03	VC4580L	IC	E. VOL&STONE	
ICF04	VC4580L	IC	BASS. B	
ICF04	VC4580L	IC	S. INDUCT	
LF 01	VQ9025K-4R7Y	INDUCTOR		
QF 01	UN4111	TRANSISTOR	MUTE. D	
QF 02	2S8562(C)	TRANSISTOR	US6V	
QF 03	2SC2785(HFE)	TRANSISTOR	US6V	
QF 06	UN411E	TRANSISTOR		
QF 07	2SA1129(K)	TRANSISTOR		
QF 08	2SC2785(HFE)	TRANSISTOR		
QF 09	2SC2785(HFE)	TRANSISTOR		
QF 10	2SC2785(HFE)	TRANSISTOR		
QF 11	2SC2785(HFE)	TRANSISTOR	TUNER SW	
QF 12	UN4213	TRANSISTOR		
QF 14	UN4215TA	TRANSISTOR		
QF101	2SD1302(S,T)	TRANSISTOR		
QF104	2SD1302(S,T)	TRANSISTOR	S MUTE1	
QF105	2SC2785(HFE)	TRANSISTOR	STONE	
QF107	2SK301(P,Q)	FET	BASS 1	
QF108	2SK301(P,Q)	FET	BASS 2	
QF109	2SD1302(S,T)	TRANSISTOR	S MUTE2	
QF201	2SD1302(S,T)	TRANSISTOR		
QF204	2SD1302(S,T)	TRANSISTOR	S MUTE1	
QF205	2SC2785(HFE)	TRANSISTOR	STONE	
QF207	2SK301(P,Q)	FET	BASS 1	
QF208	2SK301(P,Q)	FET	BASS 2	
QF209	2SD1302(S,T)	TRANSISTOR	S MUTE2	
RF 07	QR0161J-103	CARBON RESISTOR	10K 5X 1/6W	
RF 08	QR0161J-121	CARBON RESISTOR	120 5X 1/6W	
RF 09	QR0161J-2R2	CARBON RESISTOR	E. VOL	
RF 10	QR0161J-103	CARBON RESISTOR	10K 5X 1/6W	
RF 11	QR0161J-103	CARBON RESISTOR	10K 5X 1/6W	
RF 12	QR0161J-223	CARBON RESISTOR	22K 5X 1/6W	
RF 13	QR0161J-223	CARBON RESISTOR	22K 5X 1/6W	
RF 14	QR0161J-2R2	CARBON RESISTOR	2.2 5X 1/6W	
RF 16	QR0161J-562	CARBON RESISTOR	5.6K 5X 1/6W	
RF 17	QR0161J-151	CARBON RESISTOR	150 5X 1/6W	
RF 18	QR0161J-561	CARBON RESISTOR	560 5X 1/6W	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
TC 01	QAT3722-100M	T CAPACITOR	MW RF	
TC 02	QAT3722-2002M	T CAPACITOR	LW RF	
TC 03	QAT3722-3002M	T CAPACITOR		
TC 04	QAT3722-100M	T CAPACITOR		
X 001	V472124-A0	CRYSTAL		

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 014	2SA933(SRS)	TRANSISTOR		
Q 015	DTC124ES	TRANSISTOR		
R 001	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 002	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 004	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 005	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
R 006	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 008	QRD161J-241	C RESISTOR	240 5% 1/6W	
R 009	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 010	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 011	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 012	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 013	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 014	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 015	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 016	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 017	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 018	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 019	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 020	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 021	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 022	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 024	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 025	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 027	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 029	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 030	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 031	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 032	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 033	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 034	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 035	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 036	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 037	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
R 038	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 039	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 040	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 041	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 042	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 043	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 044	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 045	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R 047	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 048	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 049	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 051	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R 052	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 053	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 054	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 055	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 056	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 057	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 058	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
T 001	VQ17F12-110	IFT	FM IF	
T 002	VQ17A21-107	IFT		

14. Illustration of Packing and Parts List

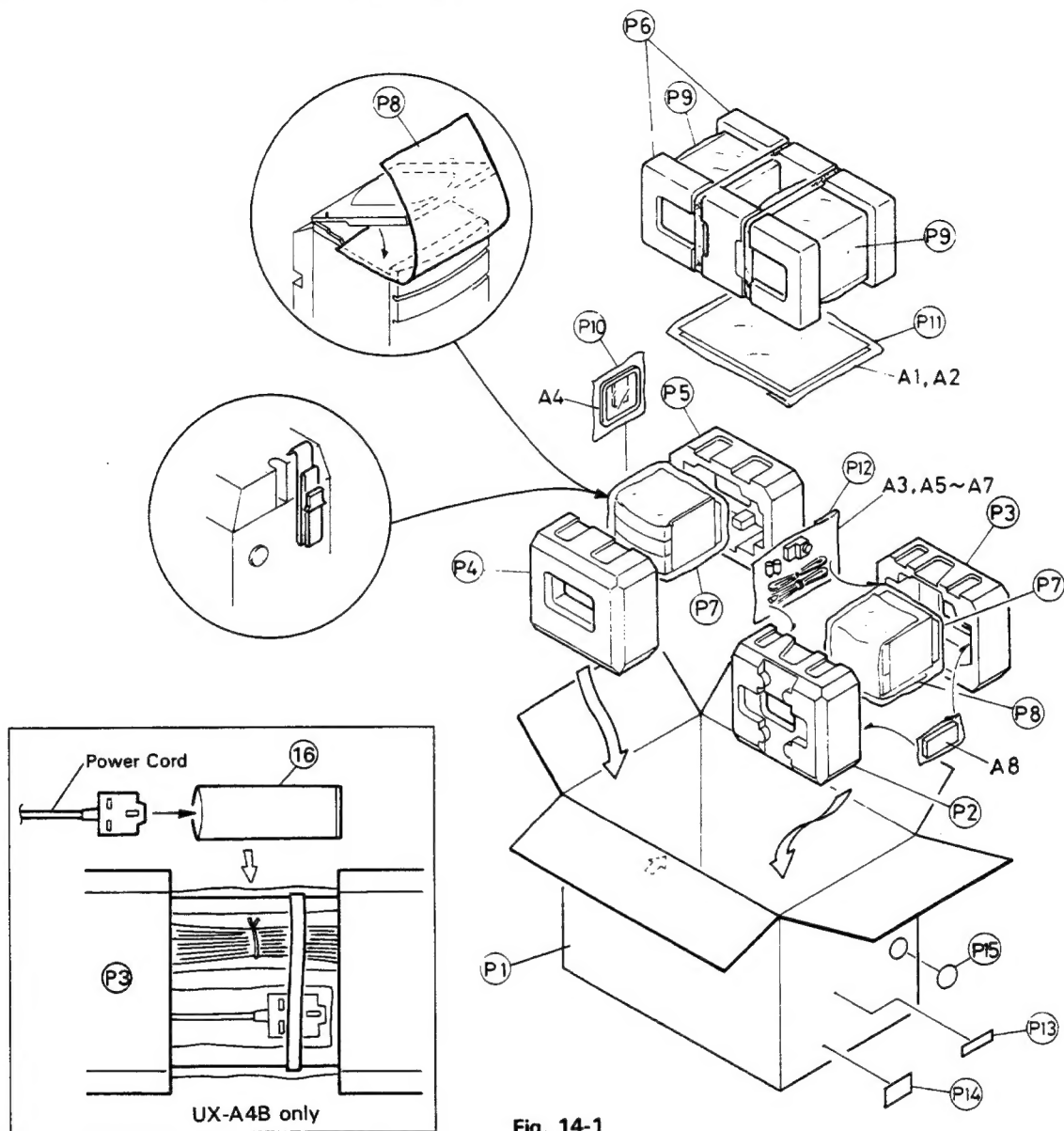


Fig. 14-1

BLOCK NO. **M9MM**

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
P	1	VPC9214-002	CARTON		1		
P	2	VPH1598-003	CUSHION	DECK:FRONT	1		
P	3	VPH1598-004	CUSHION	DECK:REAR	1		
P	4	VPH1599-001	CUSHION	CD:FRONT	1		
P	5	VPH1599-002	CUSHION	CD:REAR	1		
P	6	DH404-UX-A3	SIDE CUSHION	SPEAKER BOX ASY	1		
P	7	VPE3005-065	POLY BAG	300 X 510	2		
P	8	VPK4002-009	SHEET		2		
P	9	DH434-PC-X1000	POLY BAG	SPEAKER BOX ASY	2		
P	10	VPE3005-042	POLY BAG	AM LOOP ANT	1		
P	11	VPE3005-007	POLY BAG	INSTRUCTIONS	1		
P	12	QPGA010-03003	POLY.BAG	ACCESSORIES	1		
P	13	VND3044-001	SERIAL TICKET		1	GI,EN	
		VND3044-004	SERIAL TICKET		1	B	
		VND3044-005	SERIAL TICKET		1	G	
		VND3044-003	SERIAL TICKET		1	E	
P	14	VND3025-196	BAR CODE LABEL		1	E,B,G,GI	
P	15	QZLA001-011	GRE.POINT LABEL		1	E,G,EN	
P	16	QPGA012-02505	POLY BAG	POWER CORD	1	B	

15. Accessories

BLOCK NO. MAMM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A 1	VNN9214-251S	INSTRUCTIONS		1	B,GI	
	VNN9214-271S	INSTRUCTIONS		1	EN	
	VNN9214-261S	INSTRUCTIONS		1	E,G,EN	
A 2	BT-20066A	WARRANTY CARD		1	B,G	
	BT-20135	WARRANTY CARD		1	G	
	BT20060	WARRANTY CARD		1	B	
	E43486-340B	SAFETY SHEET		1	B	
A 3	EWP502-001	FM ANTENNA		1		
A 4	EQB4001-015	AM LOOP ANT		1		
A 5	VMP0093-002	SPEAKER CORD		2		
A 6	UM3HJ-2P	BATTERY	REMOCON	2		
A 7	EMZ2001-014	ADAPTER		1		
A 8	VGR0023-101	REMOCON UNIT	RM-RX1001	1		